

APPENDIX: Taxonomic revision of the Nearctic *erosa* species group of *Phymata* Latreille, 1802 (Heteroptera: Reduviidae: Phymatinae)

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Appendix

Material Examined

Phymata americana Melin, 1931

Total records reported: 1265, Total Adult Male: 755, Total Adult Female: 503

Specimens Examined: **CANADA: Alberta: None, Unknown or Numbered Census Division Co.:** 30 mi NE Brooks, 50.87255°N, 111.41683°W, 23 Aug 1966, A. R. Gittins, 1♂ (UCR_ENT 00079618), 1♀ (UCR_ENT 00079658) (WFBM). Dinosaur Provincial Park, 30 mi NE Brooks, 50.78333°N, 111.50000°W, 23 Aug 1966, A. R. Gittins, 1♂ (UCR_ENT 00079619) (WFBM). **Manitoba: None, Unknown or Numbered Census Division Co.:** Manitoba, 55.65713°N, 98.00878°W, no date provided, Hanhom, 1♂ (UCR_ENT 00079515) (CAS). **Ontario: Brant County Co.:** Paris, 43.00333°N, 80.00639°W, 08 Aug 2011 - 10 Aug 2011, David Punzalan, 5♂ (UCR_ENT 00092948-UCR_ENT 00092952), 3♀ (UCR_ENT 00092959-UCR_ENT 00092961) (UCR). **None, Unknown or Numbered Census Division Co.:** Ottawa, 45.39079°N, 75.70324°W, 10 Aug 1954, DJH, 1♂ (UCR_ENT 00078939) (SDNH). **Wellington County Co.:** Guelph, 43.53433°N, 80.21791°W, 16 August 2011, David Punzalan, 1♂ (UCR_ENT 00092955), 1♀ (UCR_ENT 00092956) (UCR). **York Regional Municipality Co.:** Koffler Scientific Reserve at Joker's Hill, King, ON, 44.02961°N, 79.53157°W, August 2011, David Punzalan, 2♂ (UCR_ENT 00092946, UCR_ENT 00092947), 2♀ (UCR_ENT 00092962, UCR_ENT 00092963) (UCR). **Quebec: Montreal Co.:** Montreal, 45.50000°N, 73.66667°W, 03 Oct 1953, D.J.H., 1♂ (UCR_ENT 00025175) (SDNH). **MEXICO: Sonora: None or Unknown Co.:** 19.4 mi. S. Estacion Llano, 30.07627°N, 111.10190°W, 25 Aug 1964, E. I. Schlinger, M. E. Irwin & P. A. Rauch, 1♀ (UCR_ENT 00065917) (UCR). **USA: Arizona: Apache Co.:** 16 mi N Saint Johns, 34.73795°N, 109.36028°W, 18 Sep 1964, R. L. Westcott, 1♂ (UCR_ENT 00079666) (WFBM); 18 Aug 1964, W. F. Barr, 6♂ (UCR_ENT 00079668-UCR_ENT 00079673), 2♀ (UCR_ENT 00079675, UCR_ENT 00079676) (WFBM). 18 mi W of Springerville, 34.13293°N, 109.60077°W, 14 Sep 1961, Timberlake, 1♂ (UCR_ENT 00066299) (UCR). 24 mi NW of Concho, 34.76147°N, 109.81098°W, 25 Sep 1964, Timberlake, 3♂ (UCR_ENT 00067570-UCR_ENT 00067572), 1♀ (UCR_ENT 00067569) (UCR). White Mountains 51 Alpine, 33.84810°N, 109.14313°W, 09 Aug 1981, Art Strong, 2♂ (UCR_ENT 00065918, UCR_ENT 00065919), 1♀ (UCR_ENT 00065920) (UCR). **Cochise Co.:** (Chiricahua) HWY 80 X Tex Canyon Road, 31.59399°N, 109.23956°W, 15 Aug 2013, Sullivan & Behrstock, 2♂ (UCR_ENT 00104859, UCR_ENT 00104860), 1♀ (UCR_ENT 00104858) (UCR). 0.5 to 3 mi. below Rucker Canyon Camp, 31.75293°N, 109.42977°W, 22 Sep 1970, P. S. Bartholomew, 2♂ (UCR_ENT 00079478, UCR_ENT 00079480) (CAS). 1 mi E of Portal, 31.91367°N, 109.12445°W, 21 Sep 1970, P. S. Bartholomew, 6♂ (UCR_ENT 00079454-UCR_ENT 00079456, UCR_ENT 00079481-UCR_ENT 00079483), 4♀ (UCR_ENT 00098935-UCR_ENT 00098938) (CAS). 1 mi N of Portal, 31.93010°N, 109.13360°W, 07 Aug 1969, D. E. Foster, L. S. Hawkins, R. L. Penrose, 1♀ (UCR_ENT 00079642) (WFBM). 1 mi S of Portal, 31.89910°N, 109.14083°W, 24 Sep 1955, Timberlake, 1♀ (UCR_ENT 00066292) (UCR). 1 mi SW of Portal, 31.90557°N, 109.15845°W, 10 Sep 1959, P.H. Arnaud, 1♀ (UCR_ENT 00098900) (CAS). 1 mi. E. Paradise, 31.93472°N, 109.20122°W, 12 Sep 1978, G. Gordh, 1♂ (UCR_ENT 00067534) (UCR). 1 mi. E. Portal, 31.91361°N, 109.12373°W, 01 Aug 1968, G. C. Batista, 9♂ (UCR_ENT 00061614, UCR_ENT 00066708-UCR_ENT 00066715), 2♀ (UCR_ENT 00065857, UCR_ENT 00065967) (UCR); 01 Aug 1968, L. D. & M. D Anderson, 3♂ (UCR_ENT 00065858, UCR_ENT 00066706, UCR_ENT 00066707), 1♀ (UCR_ENT 00065859) (UCR). 1 mi. S. El Frida, 31.67077°N, 109.68639°W, 12 Jul 1973, J. D. Pinto, 1♂ (UCR_ENT 00066699) (UCR). 1.5 mi. N. Portal, W. Side Foothill Road to San Simon, 31.93538°N, 109.14083°W, 13 Aug 1972, S. Frommer, 2♂ (UCR_ENT 00065951, UCR_ENT 00065952) (UCR). 1.7 mi. NW of Portal San Simon Rd, 31.92384°N, 109.16573°W, 26 Jul 1973, S. I. & S. L. Frommer, 2♂ (UCR_ENT 00065949, UCR_ENT 00065950), 1♀ (UCR_ENT 00065948) (UCR). 1.7 mi. S. of Paradise, 31.91005°N, 109.21833°W, 12 Sep 1978, G. Gordh, 1♂ (UCR_ENT 00067533) (UCR). 10 mi E of Douglas, 31.34400°N, 109.37480°W, 11 Aug 1940, E. S. Ross, 1♂ (UCR_ENT 00047752) (CAS). 10 mi W of Douglas, 31.34400°N, 109.71000°W, 11 Aug 1940, E. S. Ross, 1♂ (UCR_ENT 00047753) (CAS). 10 miles NW Bisbee, Arizona, 31.55064°N, 110.04808°W, 5 October 1950, Unkonwn, 1♂ (UCR_ENT 00086649), 1♀ (UCR_ENT 00095655) (LACM). 13 mi. E. of Tombstone, 31.71259°N, 109.84514°W, 08 Sep 1967, P. S. Bartholomew, 3♂ (UCR_ENT 00079467-UCR_ENT 00079469), 3♀ (UCR_ENT 00098947-UCR_ENT 00098949) (CAS). 14 mi. W. of Douglas, 31.34422°N, 109.78265°W, 02 Aug 1965, K. W. Brown, 1♂ (UCR_ENT 00066718) (UCR). 14.5 mi. N. of Douglas, 31.55490°N, 109.54472°W, 02 Aug 1965, L. D. Anderson, 1♂ (UCR_ENT 00066717), 1♀ (UCR_ENT 00061676) (UCR). 15 mi E of Douglas, San Bernardino Ranch, 31.40477°N, 109.78118°W, 04 Sep 1957, W. F. Barr, 1♂ (UCR_ENT 00079722) (WFBM). 16 km SW Wilcox, 32.15076°N, 109.95195°W, 09 Aug 1975, Edward S. Ross, 1♂ (UCR_ENT 00079508) (CAS). 16 mi E Douglas, S. BDO. RCH., 31.34415°N,

109.27279°W, 28 Aug 1971, D.P. Levin, 1♀ (UCR_ENT 00079633) (WFBM). 18mi W of Bisbee, 31.44770°N, 110.23402°W, 10 Aug 1940, Timberlake, 1♀ (UCR_ENT 00066304) (UCR). 2 mi E of Portal, 31.90800°N, 109.11000°W, 27 Sep 1962, W. F. Barr, 1♀ (UCR_ENT 00079664) (WFBM). 2 mi N of Paradise, 31.96363°N, 109.21833°W, 31 Jul 1973, J. D. Pinto, 1♀ (UCR_ENT 00065972) (UCR). 2 mi NE of Portal, 31.93405°N, 109.11673°W, 08 Aug 1967, E. I. Schlinger, 1♂ (UCR_ENT 00065865) (UCR). 2 mi. E. of Portal, Chiri. Mts., 31.90679°N, 109.11972°W, 13 Aug 1965, K. W. Brown, 1♂ (UCR_ENT 00065862) (UCR). 2 mi. E. of Portal, 31.91361°N, 109.10663°W, 30 Aug 1970, J. D. Pinto, 1♂ (UCR_ENT 00065960) (UCR). 2 mi. SE Apache, 31.66975°N, 109.10754°W, 16 Aug 1969, L. D. Anderson, 1♂ (UCR_ENT 00065963), 1♀ (UCR_ENT 00065964) (UCR); 19 Aug 1968, G. C. Batista, 1♂ (UCR_ENT 00066705) (UCR). 2.7mi E of Onion Saddle, 31.93332°N, 109.21660°W, 23 Sep 1955, Timberlake, 3♂ (UCR_ENT 00066270-UCR_ENT 00066272), 2♀ (UCR_ENT 00066273, UCR_ENT 00066274) (UCR). 2.9 mi S of Pima, 32.85409°N, 109.82758°W, 17 Jul 1953, Timberlake, 1♀ (UCR_ENT 00066307) (UCR). 20 mi south of Wilcox, 31.96253°N, 109.83139°W, 11 Aug 1977, D. K. E., 3♂ (UCR_ENT 00025219-UCR_ENT 00025221) (SDNH). 3 mi E of Portal, 31.90000°N, 109.09800°W, 13 Aug 1965, M. E. Irwin, 1♀ (UCR_ENT 00065864) (UCR). 3 mi E of Portal, Chiricahua Mts, 31.91353°N, 109.09034°W, 13 Aug 1965, C. L. Crow, 1♀ (UCR_ENT 00061666) (UCR); 13 Aug 1965, M. E. Irwin, 2♀ (UCR_ENT 00061667, UCR_ENT 00061668) (UCR). 3 mi N Cochise, 32.15715°N, 109.92111°W, 28 August 1962, Eric Fisher, 4♂ (UCR_ENT 00095723-UCR_ENT 00095726), 2♀ (UCR_ENT 00095705, UCR_ENT 00095706) (LACM). 3 mi N Kansas Settlement, 32.10854°N, 109.76222°W, 25 Jul 1969, D. E. Foster, L. S. Hawkins, R. L. Penrose, 1♀ (UCR_ENT 00079643) (WFBM). 3 mi W of Portal, 31.88200°N, 109.18300°W, 28 Aug 1957, W. F. Barr, 2♂ (UCR_ENT 00079595, UCR_ENT 00079596), 2♀ (UCR_ENT 00079624, UCR_ENT 00079665) (WFBM); 28 Aug 1971, D.P. Levin, 2♀ (UCR_ENT 00079661, UCR_ENT 00079662) (WFBM); 8/7/1983, W. F. Barr, 1♂ (UCR_ENT 00080175), 1♀ (UCR_ENT 00080178) (WFBM). 3 mi. E. of Portal Chiri. Mts., 31.91360°N, 109.08953°W, 13 Aug 1965, M. E. Irwin, 1♂ (UCR_ENT 00065860) (UCR); 13 Aug 1965, C. L. Crow, 1♀ (UCR_ENT 00065861) (UCR). 3.5 mi. S Apache, 31.63948°N, 109.13167°W, 02 Aug 1967, L. D. Anderson, 1♂ (UCR_ENT 00065971) (UCR). 36 mi NE Douglas, 31.71319°N, 109.11209°W, 19 Sep 1972, G. R. Ballmer, 1♀ (UCR_ENT 00065880) (UCR). 4 mi NE of Portal, 31.95500°N, 109.09200°W, 4/6/1959, R. L. Westcott, 1♂ (UCR_ENT 00095739), 1♀ (UCR_ENT 00095781) (LACM). 4 mi NW of Tombstone, 31.75972°N, 110.11083°W, 13 Aug 1940, Timberlake, 1♂ (UCR_ENT 00066298) (UCR). 4.5 mi SE Portal, 31.88333°N, 109.06667°W, 25 Jul 2001, H. A. Hesperheide, 1♀ (UCR_ENT 00092923) (UCR). 4.5 mi SW Portal, 31.86751°N, 109.19585°W, 11 Aug 1981 - 20 Aug 1981, K & M Cazier, 1♂ (UCR_ENT 00078940) (SDNH). 4.5 mi. SW Portal, 31.86742°N, 109.19523°W, 11 Aug 1981 - 20 Aug 1981, K & M Cazier, 1♂ (UCR_ENT 00025222) (SDNH). 4.7 mi. S. Apache, 31.62206°N, 109.13167°W, 20 Aug 1967, E. I. Schlinger, 2♂ (UCR_ENT 00065874, UCR_ENT 00066740) (UCR). 5 Miles S Rodeo, 31.77302°N, 109.07571°W, 9/4/1970, Unknown, 1♀ (UCR_ENT 00095682) (LACM). 5 mi S Portal, 31.84104°N, 109.14083°W, 11 August 1962, Eric Fisher, 1♂ (UCR_ENT 00095745) (LACM). 5 mi S of Willcox, 32.18022°N, 109.83139°W, 22 Aug 1968, G. C. Batista, 1♂ (UCR_ENT 00061602) (UCR). 5 mi W Ft. Huachuca, 31.55346°N, 110.43454°W, 12 August 1988, Unknown, 1♂ (UCR_ENT 00095756) (LACM). 5 mi W of Portal, 31.35320°N, 109.14260°W, 27 Aug 1957, W. F. Barr, 1♀ (UCR_ENT 00079634) (WFBM). 5 mi W of Portal, Southwestern Research Station (SWRS), 31.88250°N, 109.20600°W, 14 Sep 1966, P. H. Arnaud Jr., 3♀ (UCR_ENT 00098921-UCR_ENT 00098923) (CAS). 5 mi. W of Coronado National Monument, 31.36777°N, 110.32237°W, 17 Sep 1972, G. R. Ballmer, 5♂ (UCR_ENT 00061649-UCR_ENT 00061650, UCR_ENT 00065875-UCR_ENT 00065877), 1♀ (UCR_ENT 00061648) (UCR). 5.5 rd. mi. SE. Onion Saddle, 31.90098°N, 109.23060°W, 22 Oct 1964, P. H. Arnaud Jr., 4♀ (UCR_ENT 00098931-UCR_ENT 00098934) (CAS). 6.4 mi W of Benson, 31.96773°N, 110.40338°W, 05 Oct 1962, Timberlake, 1♀ (UCR_ENT 00066303) (UCR). 7 mi E of Portal, 31.87100°N, 109.05000°W, 29 Aug 1967, F. G. Andrews, 1♂ (UCR_ENT 00065856) (UCR). 7 mi. SE Portal, 31.84174°N, 109.05620°W, 05 Aug 1970, Loyd House, 2♂ (UCR_ENT 00065961, UCR_ENT 00065962) (UCR). 7.6 mi. SE. Apache, Skeleton Cyn., 31.59417°N, 109.06833°W, 02 Aug 1971, J. D. Pinto, 1♀ (UCR_ENT 00061675) (UCR). 8 mi NE of Douglas, 31.44336°N, 109.47381°W, 11 Aug 1940, Timberlake, 1♂ (UCR_ENT 00066286) (UCR). 8 mi S of Bowie, 32.21073°N, 109.48639°W, 22 Aug 1967, E. I. Schlinger, 1♂ (UCR_ENT 00066736) (UCR). 8 mi. E. of Tombstone, 31.71271°N, 109.93045°W, 08 Sep 1967, P. S. Bartholomew, 1♂ (UCR_ENT 00079470) (CAS). Apache, 31.69028°N, 109.13167°W, 05 Sep 1967, B. S. Cheary, 1♀ (UCR_ENT 00065974) (UCR). Bisbee, 31.44695°N, 109.93007°W, 21 Aug 1988, W. F. Barr, 1♂ (UCR_ENT 00079720), 1♀ (UCR_ENT 00079644) (WFBM). Bruno Canyon, Chiricahua Mts., 31.74139°N, 109.46389°W, 28 Aug 1965, G. E. Wallace, 1♂ (UCR_ENT 00065869) (UCR). Cave Creek Canyon, 31.89620°N, 109.16367°W, 9 August 1970, T. Stenwedel, 2♂ (UCR_ENT 00086601, UCR_ENT 00086602) (LACM); 05 Sep 1959, R. L. Westcott, 12♂ (UCR_ENT 00096299-UCR_ENT 00096310), 4♀ (UCR_ENT 00096311-UCR_ENT 00096314) (LACM). Cave Creek Canyon Rd. Jct. Snowshed Trail, 31.84354°N, 109.28638°W, 12 Aug 1973, S. Frommer, 2♂ (UCR_ENT 00065943, UCR_ENT 00065944) (UCR). Cave Creek Canyon, Chiricahua Mountains, Southwestern Research Station, 31.88333°N, 109.20000°W, 21 Aug 1980, H. A. Hesperheide, 1♀ (UCR_ENT 00092924) (UCR). Cave Creek, Chiricahua Mts., 5-6000 ft, 31.88352°N, 109.17645°W, 25 Aug 1927, J. A. Kusche, 1♂ (UCR_ENT 00046288) (CAS). Chiri. Mts., 31.92981°N, 109.38228°W, 05 Aug 1965, K. W. Brown, 1♂ (UCR_ENT 00065863) (UCR). Chiricahua Mountains, 31.92981°N, 109.38228°W, 09 Sep 1974, A. Strawn, 6♂ (UCR_ENT 00065953-UCR_ENT 00065954, UCR_ENT 00067428-UCR_ENT 00067431) (UCR); 07 Sep 1973, A. Strawn, 1♂ (UCR_ENT 00065955), 2♀ (UCR_ENT 00065980, UCR_ENT 00065981) (UCR); 08 Sep 1973, A. Strawn, 4♂ (UCR_ENT 00065956-UCR_ENT 00065959), 2♀ (UCR_ENT 00065978, UCR_ENT 00065979) (UCR). Chiricahua Mountains, 31.59222°N, 109.24000°W, 08 Sep 1973, A. Strawn, 1♂ (UCR_ENT 00066716), 2♀ (UCR_ENT 00067439, UCR_ENT 00067440) (UCR); 06 Sep 1959, M. Thompson, 2♂ (UCR_ENT 00123172, UCR_ENT 00123173), 2♀ (UCR_ENT 00123170, UCR_ENT 00123171) (UCR). Chiricahua Mountains, Cave Creek Canyon, 31.89620°N, 109.16367°W, 20 Sep 1970, P. S. Bartholomew, 1♀ (UCR_ENT 00098941) (CAS). Chiricahua Mountains, Herb Martyr Dam, 31.87090°N, 109.23400°W, 01 Oct 1966, Paul H. Arnaud Jr., 1♀ (UCR_ENT 00098952) (CAS). Chiricahua Mountains, Portal, 31.91361°N, 109.14083°W, 17 Aug 1979 - 19 Aug 1979, D. K. Faulkner, 8♂ (UCR_ENT 00025207-UCR_ENT 00025214), 1♀ (UCR_ENT 00078773) (SDNH). Chiricahua Mountains, Rustler Park, 31.90410°N, 109.27990°W, 01 Aug 1967, L. D. Anderson, 2♂ (UCR_ENT

00065982, UCR_ENT 00065985), 3♀ (UCR_ENT 00065983-UCR_ENT 00065984, UCR_ENT 00065986) (UCR). Chiricahua Mountains, Southwestern Research Station 8 km W Portal, 31.88380°N, 109.20605°W, 20 Aug 1985, Paul H. Arnaud Jr., 1♀ (UCR_ENT 00098953) (CAS). Chiricahua Mts., Rustler Park, 31.90490°N, 109.27980°W, 27 Jun 1931, Unknown, 1♀ (UCR_ENT 00078765) (SDNH). Chiricahua Mts 4 mi E. Hill Top, 31.99442°N, 109.20848°W, 09 Aug 1975, J. D. Pinto, 2♀ (UCR_ENT 00061679, UCR_ENT 00065973) (UCR). Chiricahua Mts. Herb Martyr Lake, 31.87352°N, 109.23475°W, 11 Aug 1980, L. Guidry, 1♂ (UCR_ENT 00078791), 2♀ (UCR_ENT 00078929, UCR_ENT 00078930) (SDNH). Chiricahua Mts. Pinery Canyon, 31.97394°N, 109.33312°W, 06 Aug 1972, J. D. Pinto, 2♂ (UCR_ENT 00065945, UCR_ENT 00065946) (UCR). Chiricahua Mts. Pinery Canyon, 0.8 mi. W. Nat. Forrest Line, 31.98139°N, 109.37111°W, 19 Jul 1972, J. D. Pinto, 1♂ (UCR_ENT 00065947) (UCR). Chiricahua Mts., Silver Creek, 31.92318°N, 109.12807°W, 08 Oct 1927, J. A. Kusche, 1♂ (UCR_ENT 00046284) (CAS). Chiricahua Nat. Mon., 32.00444°N, 109.35611°W, 16 Aug 1965, K. W. Brown, 2♂ (UCR_ENT 00061631, UCR_ENT 00065871), 1♀ (UCR_ENT 00065870) (UCR). Chiricahua National Monument, 32.00010°N, 109.00595°W, 22 August 1951, Lloyd Martin, 1♂ (UCR_ENT 00095738), 1♀ (UCR_ENT 00095663) (LACM); 8/27/1951, Unkonwn, 1♂ (UCR_ENT 00095740) (LACM). Coronado Nat. For. Sunny Flat Cmpgd., 31.88480°N, 109.17540°W, 16 Aug 1972, S. I. & S. L. Frommer, 2♂ (UCR_ENT 00061627, UCR_ENT 00067434), 2♀ (UCR_ENT 00065977, UCR_ENT 00067447) (UCR). Douglas, 31.34455°N, 109.54534°W, 29 Aug 1925, W W J, 1♂ (UCR_ENT 00025186), 1♀ (UCR_ENT 00078766) (SDNH); 06 Sep 1975, Edward S. Ross, 1♂ (UCR_ENT 00079489), 2♀ (UCR_ENT 00098917, UCR_ENT 00098918) (CAS); 07 Sep 1975, Edward S. Ross, 1♂ (UCR_ENT 00079490) (CAS). Douglas, 31.34444°N, 109.54472°W, 15 October 1944, Raymond A. Martin, 4♂ (UCR_ENT 00086603-UCR_ENT 00086604, UCR_ENT 00086639, UCR_ENT 00086640), 4♀ (UCR_ENT 00095666-UCR_ENT 00095669) (LACM); 16 October 1944, Raymond A. Martin, 3♂ (UCR_ENT 00086605-UCR_ENT 00086606, UCR_ENT 00086641), 4♀ (UCR_ENT 00095670-UCR_ENT 00095673) (LACM); 8/11/1940, W. L. Swisher, 2♂ (UCR_ENT 00095650, UCR_ENT 00095651), 2♀ (UCR_ENT 00095660, UCR_ENT 00095661) (LACM); 31 October 1944, Raymond A. Martin, 1♂ (UCR_ENT 00095746), 4♀ (UCR_ENT 00095674-UCR_ENT 00095677) (LACM). Dry Canyon, Sands Ranch, SE end of Whetstone Mountains, 31.77789°N, 110.39970°W, 10 Aug 1952, H. B. Leech & J. W. Green, 5♂ (UCR_ENT 00079442-UCR_ENT 00079444, UCR_ENT 00079487, UCR_ENT 00079488), 2♀ (UCR_ENT 00098950, UCR_ENT 00098951) (CAS). Elfrida, 31.69000°N, 109.69000°W, 05 Jul 1968, Unknown, 2♂ (UCR_ENT 00025215, UCR_ENT 00025216) (SDNH); 05 Aug 1969, Unknown, 1♀ (UCR_ENT 00078779) (SDNH). Gayleyville 1.2 mi NE Paradise, 31.95037°N, 109.21839°W, 20 Aug 1976, Saul Frommer, 2♂ (UCR_ENT 00061661, UCR_ENT 00061662) (UCR). Huachuca Mountains, Carr Canyon, 31.45667°N, 110.23889°W, no date provided, Unknown, 1♀ (UCR_ENT 00092925) (UCR). Jhus Canyon, Chiricahua Mts., 31.98167°N, 109.22167°W, 02 Aug 1967, E. I. Schlinger, 3♂ (UCR_ENT 00066719-UCR_ENT 00066721) (UCR). Paradise, 31.93470°N, 109.21833°W, 13 Aug 1975, Unknown, 7♂ (UCR_ENT 00025198-UCR_ENT 00025204), 5♀ (UCR_ENT 00078780-UCR_ENT 00078784) (SDNH). Paradise, Chiri. Mts., 31.93481°N, 109.21895°W, 15 Aug 1965, K. W. Brown, 1♂ (UCR_ENT 00065872) (UCR). Parker Canyon Lake, 31.42630°N, 110.45525°W, 8/10/1975, R. W. Duff, 1♀ (UCR_ENT 00095685) (LACM). Pinery Canyon, 31.94815°N, 109.30730°W, 20 Aug 1972, J. D. Pinto, 2♂ (UCR_ENT 00067432, UCR_ENT 00067433) (UCR). Pinery Canyon, Chiricahua Mts., 31.98139°N, 109.37111°W, 29 Aug 1957, W. F. Barr, 11♂ (UCR_ENT 00079574-UCR_ENT 00079584), 5♀ (UCR_ENT 00079647, UCR_ENT 00079650-UCR_ENT 00079653) (WFBM). Portal, 31.59222°N, 109.24000°W, 27 Aug 1964, L. D. Anderson, 8♂ (UCR_ENT 00066726-UCR_ENT 00066733), 5♀ (UCR_ENT 00061663-UCR_ENT 00061665, UCR_ENT 00065855, UCR_ENT 00067528) (UCR); 02 Aug 1975, J. D. Pinto, 1♂ (UCR_ENT 00061678) (UCR); 29 Aug 1967, E. I. Schlinger, 3♂ (UCR_ENT 00065846-UCR_ENT 00065847, UCR_ENT 00066734), 1♀ (UCR_ENT 00065848) (UCR); 11 Aug 1967, R. E. Frisbie, 3♂ (UCR_ENT 00065849-UCR_ENT 00065851) (UCR); 11 Aug 1967, D. J. Culver, 2♂ (UCR_ENT 00065852, UCR_ENT 00065853), 1♀ (UCR_ENT 00065854) (UCR); 12 Aug 1940, Timberlake, 8♂ (UCR_ENT 00066229-UCR_ENT 00066236), 3♀ (UCR_ENT 00066237-UCR_ENT 00066239) (UCR); 10 Sep 1954, Timberlake, 1♂ (UCR_ENT 00066240), 1♀ (UCR_ENT 00066241) (UCR); 26 Aug 1957, W. F. Barr, 6♂ (UCR_ENT 00079556-UCR_ENT 00079559, UCR_ENT 00079723, UCR_ENT 00079724) (WFBM); 26 Aug 1957, M. A. Cazier, 1♀ (UCR_ENT 00079663) (WFBM). Portal, 31.91333°N, 109.14194°W, 9 September 1929, C. W. Kirkwood, 2♂ (UCR_ENT 00086652, UCR_ENT 00086653), 3♀ (UCR_ENT 00095656-UCR_ENT 00095658) (LACM). Portal, Chiricahua Mountains, 31.91742°N, 109.13274°W, 12 Aug 1940, E. S. Ross, 2♂ (UCR_ENT 00047750, UCR_ENT 00047751) (CAS); 20 Aug 1983, L. D. Anderson, 2♂ (UCR_ENT 00061669, UCR_ENT 00061670), 5♀ (UCR_ENT 00065937-UCR_ENT 00065941) (UCR); 16 Aug 1968, G. C. Batista, 1♂ (UCR_ENT 00065942) (UCR). Post Office Canyon, 33.97000°N, 109.92306°W, 12 Aug 1967, F. G. Andrews, 1♂ (UCR_ENT 00066737) (UCR). Ridge between Redington and Wilcox, 32.36233°N, 110.15885°W, 15 Oct 1959, C. F. Harbison, 5♂ (UCR_ENT 00025193-UCR_ENT 00025197), 3♀ (UCR_ENT 00078776-UCR_ENT 00078778) (SDNH). S. W. Research Station, 31.88250°N, 109.20333°W, 10 Sep 1971, D. A. Sheridan, 2♂ (UCR_ENT 00061671, UCR_ENT 00061672), 1♀ (UCR_ENT 00061673) (UCR). S.W.R.S. Portal, 31.88250°N, 109.20333°W, 20 Aug 1970, Loyd House, 1♀ (UCR_ENT 00061677) (UCR). SW. Research Station, 31.88398°N, 109.20605°W, 10 Sep 1971, D. A. Sheridan, 4♂ (UCR_ENT 00066722-UCR_ENT 00066725) (UCR). SWRS, 5 miles W Portal, 31.88250°N, 109.20341°W, 07 Sep 1967 - 12 Sep 1967, N. W. Baker, 6♂ (UCR_ENT 00086620-UCR_ENT 00086622, UCR_ENT 00086642-UCR_ENT 00086643, UCR_ENT 00095722), 3♀ (UCR_ENT 00095707-UCR_ENT 00095709) (LACM). Silver Cr., 1.7 mi W Portal, 31.92315°N, 109.12867°W, 22 Aug 1975, S. I. & S. L. Frommer, 9♂ (UCR_ENT 00061651, UCR_ENT 00061653-UCR_ENT 00061659, UCR_ENT 00066739), 3♀ (UCR_ENT 00061652, UCR_ENT 00061660, UCR_ENT 00065866) (UCR). Skeleton Canyon, near Apache, 31.59417°N, 109.06833°W, 19 Aug 1979, Edward S. Ross, 1♂ (UCR_ENT 00079493), 1♀ (UCR_ENT 00098943) (CAS). Southwestern Research Station (SWRS), 5 mi W of Portal, 31.88250°N, 109.20600°W, 14 Sep 1966, P. H. Arnaud, Jr., 4♂ (UCR_ENT 00079471-UCR_ENT 00079474) (CAS). Sunny Slope, Cave Creek (Chirihucagua Mts.), 31.88578°N, 109.17628°W, 26 Aug 1964, E. I. Schlinger, 1♀ (UCR_ENT 00065898) (UCR). Tex Canyon, Chiricahua Mts., 31.65399°N, 109.30867°W, 05 Oct 1927, J. A. Kusche, 4♂ (UCR_ENT 00046289-UCR_ENT 00046292), 4♀ (UCR_ENT 00046337, UCR_ENT 00046340-UCR_ENT 00046341, UCR_ENT 00046349) (CAS); 07 Oct 1927, J. A.

Kusche, 3♂ (UCR_ENT 00046293-UCR_ENT 00046295) (CAS); 08 Oct 1927, J. A. Kusche, 1♂ (UCR_ENT 00046296) (CAS); 16 Sep 1927, J. A. Kusche, 2♂ (UCR_ENT 00046297, UCR_ENT 00046298), 4♀ (UCR_ENT 00046335-UCR_ENT 00046336, UCR_ENT 00046346, UCR_ENT 00046347) (CAS); 26 Aug 1927, J. A. Kusche, 2♂ (UCR_ENT 00046299, UCR_ENT 00046300), 3♀ (UCR_ENT 00046338-UCR_ENT 00046339, UCR_ENT 00046345) (CAS); 23 Sep 1927, J. A. Kusche, 2♂ (UCR_ENT 00046303, UCR_ENT 00046304), 2♀ (UCR_ENT 00046592, UCR_ENT 00046593) (CAS). Tex Canyon, Chiricahua Mts. (45-6000 ft), 31.65389°N, 109.30867°W, 01 Oct 1927, J. A. Kusche, 3♂ (UCR_ENT 00046305-UCR_ENT 00046307), 6♀ (UCR_ENT 00046352-UCR_ENT 00046353, UCR_ENT 00046588-UCR_ENT 00046591) (CAS); 08 Oct 1927, J. A. Kusche, 1♂ (UCR_ENT 00046308) (CAS); 07 Oct 1927, J. A. Kusche, 6♀ (UCR_ENT 00046334, UCR_ENT 00046342-UCR_ENT 00046344, UCR_ENT 00046348, UCR_ENT 00046351) (CAS). Western slope Chiricahua Mountains, 31.92981°N, 109.38228°W, 07 Aug 1963, A. R. Moldenke, 4♂ (UCR_ENT 00079438-UCR_ENT 00079441) (CAS). Whetstone Mountains, 31.80311°N, 110.41685°W, 18 Aug 1941, R. A. Flock, 1♀ (UCR_ENT 00065925) (UCR). Wilcox Dry Lake 3.4 mi ESE Wilcox, 32.25694°N, 109.79583°W, 03 Sep 1974, T. J. Zavortink, 1♂ (UCR_ENT 00045445), 1♀ (UCR_ENT 00045444) (CAS). Willcox, 32.25278°N, 109.83139°W, 01 Aug 1965, G. E. Wallace, 1♀ (UCR_ENT 00065879) (UCR). Willcox Dry Lake, 32.14068°N, 109.90673°W, 25 Aug 1967, E. I. Schlinger, 1♂ (UCR_ENT 00066738) (UCR). Yaqui Canyon Area, Coronado National Memorial, 31.00581°N, 110.00453°W, 27 August 1972, R. R. Snelling, 1♀ (UCR_ENT 00095680) (LACM). Yaqui Canyon area, 31.33472°N, 110.29583°W, 27 August 1972, R. R. Snelling, 2♂ (UCR_ENT 00086599, UCR_ENT 00086600) (LACM). **Coconino Co.:** 22.7 mi. W. Cameron, 35.87515°N, 111.81854°W, 30 Aug 1967, Timberlake, 1♀ (UCR_ENT 00061718) (UCR). 26 mi. east Tuba City, 36.13409°N, 110.77225°W, 24 Sep 1964, Timberlake, 1♀ (UCR_ENT 00067573) (UCR). 7 mi. E Ash Fork, 35.22495°N, 112.35976°W, 31 Aug 1972, Bob Duff, 1♂ (UCR_ENT 00096322) (LACM). Coconino National Forest Oak Creek Canyon, 34.91252°N, 111.72682°W, 15 Sep 1967, F.T. Hovore, 1♀ (UCR_ENT 00123174) (UCR). Flagstaff, 35.19806°N, 111.65056°W, 24 Aug 1937 - 27 Aug 1937, R. P. Allen, 2♂ (UCR_ENT 00046322, UCR_ENT 00046323) (CAS). Flagstaff, 35.21500°N, 111.60600°W, 3 October 1955, Truxal & Martin, 1♀ (UCR_ENT 00095662) (LACM). Flagstaff, 7 mi E, 35.19800°N, 111.52630°W, 21 August 1977, G. C. Duffy, 1 Mixed (UCR_ENT 00095763) (LACM). Kaibab National Forest, 36.83258°N, 112.25583°W, 30 Jun 1990, J.N. Hogue, 1♂ (UCR_ENT 00123187) (UCR). Oak Creek Canyon, Todd's lodge, 34.91238°N, 111.72688°W, 29 Sep 1948, G. H. and J. L. Sperry, 1♂ (UCR_ENT 00061705) (UCR). Sedona, 34.86974°N, 111.76098°W, 31 Aug 1967, P. Bartholomew, 1 Juvenile sex unknown (UCR_ENT 00079516), 9♂ (UCR_ENT 00079458-UCR_ENT 00079466), 7♀ (UCR_ENT 00098924-UCR_ENT 00098930) (CAS). Williams, 35.24944°N, 112.19028°W, 29 Aug 1928, E. R. Leach, 1♂ (UCR_ENT 00046697) (CAS); 04 Aug 1956 - 05 Aug 1956, Belkin & McD., 2♀ (UCR_ENT 00095772, UCR_ENT 00095773) (LACM). **Gila Co.:** 11 mi. S. Seneca U.S. 60, 33.59021°N, 110.64130°W, 27 Aug 1964, E. I. Schlinger, 1♀ (UCR_ENT 00065891) (UCR); 27 Aug 1964, M. E. Irwin, 1♂ (UCR_ENT 00065892), 1♀ (UCR_ENT 00065893) (UCR). 11.1 mi. S. Seneca, 33.59562°N, 110.51222°W, 27 Aug 1964, E. I. Schlinger, 1♂ (UCR_ENT 00061615) (UCR). 14.8mi NW of Globe, Apache Trail, 33.54703°N, 110.94470°W, 16 Sep 1953, Timberlake, 1♂ (UCR_ENT 00066301) (UCR). 2 mi S Payson, 34.28333°N, 111.00000°W, 11 Sep 1958, Menke & Stange, 4♂ (UCR_ENT 00096315-UCR_ENT 00096318), 1♀ (UCR_ENT 00096319) (LACM). 2 mi. E of Star Valley, Highway 160, 34.26408°N, 111.22370°W, 23 Aug 1967, Pendleton & Ziff, 1♂ (UCR_ENT 00096321) (LACM). 4 mi. N. Pine, 34.44247°N, 111.45444°W, 22 Aug 1967, Timberlake, 1♂ (UCR_ENT 00067575) (UCR). Kohls Ranch, 34.32528°N, 111.09361°W, 01 Jul 1953, L. D. Anderson, 1♀ (UCR_ENT 00065991) (UCR). Miami, 33.39667°N, 110.87166°W, 27 Sep 1937, R. P. Allen, 2♂ (UCR_ENT 00079509, UCR_ENT 00079510), 3♀ (UCR_ENT 00098901-UCR_ENT 00098903) (CAS). Payson, 34.23083°N, 111.32444°W, 17 Sep 1953, Timberlake, 1♀ (UCR_ENT 00067579) (UCR). Salt River Canyon & U.S. 60, 33.61949°N, 110.92289°W, 27 Aug 1964, M. E. Irwin, 1♂ (UCR_ENT 00065897) (UCR). Star Valley (5 Miles ENE Payson), 34.25500°N, 111.25778°W, 23 August 1967, Pendleton & Ziff, 1♀ (UCR_ENT 00095678) (LACM). **Graham Co.:** 3 mi. N.E. Eden, 32.99189°N, 109.85803°W, 11 Sep 1957, Timberlake, 1♀ (UCR_ENT 00067577) (UCR). Graham Mountains, 33.17874°N, 109.86241°W, 15 Sep 1940, Bryant, 1♀ (UCR_ENT 00047756) (CAS). Noon Creek, Coronado National Forest. 17 mi. S. Safford, 32.66889°N, 109.78417°W, 27 Aug 1964, E. Schlinger, 3♂ (UCR_ENT 00065841-UCR_ENT 00065843), 3♀ (UCR_ENT 00065844-UCR_ENT 00065845, UCR_ENT 00065878) (UCR). **Greenlee Co.:** 33 mi N of Clifton [Rt 191], 33.32767°N, 109.35106°W, 07 Sep 1967, P. S. Bartholomew, 3♂ (UCR_ENT 00079475-UCR_ENT 00079477) (CAS). Apache National Forest, N of Clifton, 33.58333°N, 109.08333°W, 07 Sep 1967, P. S. Bartholomew, 9♂ (UCR_ENT 00079445-UCR_ENT 00079453), 5♀ (UCR_ENT 00098954-UCR_ENT 00098958) (CAS). **Maricopa Co.:** 28 mi SE of Gila Bend, 32.86925°N, 112.42575°W, 26 Aug 1960, P. H. Arnaud, Jr. & D. C. Rentz, 1♂ (UCR_ENT 00079507) (CAS). **Mohave Co.:** Hualapai Mts. S. of Kingman, 34.90001°N, 113.88411°W, 30 Jul 1965, M. E. Irwin, 1♂ (UCR_ENT 00065888), 1♀ (UCR_ENT 00065890) (UCR). **Navajo Co.:** 4 mi. N. of Snowflake, 34.57136°N, 110.07778°W, 28 Aug 1964, E. I. Schlinger, 1♂ (UCR_ENT 00065894) (UCR); 28 Aug 1964, M. E. Irwin, 1♂ (UCR_ENT 00065895), 1♀ (UCR_ENT 00065896) (UCR). Hotevilla, 35.92788°N, 110.67237°W, 10 Oct 1979, J. C. & E. M. Hall, 1♀ (UCR_ENT 00067535) (UCR). Pinetop, 34.14194°N, 109.96416°W, 12 Sep 1970, P. S. Bartholomew, 1♂ (UCR_ENT 00079479) (CAS). **Pima Co.:** 16 mi S of Tucson, 31.99036°N, 110.92583°W, 11 Aug 1924, E. P. Van Duzee, 1♂ (UCR_ENT 00046301) (CAS). 1mi N of Pima, 32.01395°N, 110.95056°W, 18 Sep 1953, Timberlake, 1♀ (UCR_ENT 00066305) (UCR). 2.9mi S of Pima, 31.95735°N, 110.95056°W, 17 Sep 1953, Timberlake, 2♂ (UCR_ENT 00066275, UCR_ENT 00066276), 3♀ (UCR_ENT 00066278-UCR_ENT 00066280) (UCR). 22 mi N of Tucson, 32.54095°N, 110.92583°W, 14 Aug 1924, J. O. Martin, 1♂ (UCR_ENT 00046302) (CAS). 4.8mi S of Pima, 31.92978°N, 110.95056°W, 17 Sep 1953, Timberlake, 1♂ (UCR_ENT 00066302) (UCR). Box Canyon, 31.80175°N, 110.80786°W, 21 Aug 1979, D. K. Faulkner, 2♂ (UCR_ENT 00025205, UCR_ENT 00025206), 2♀ (UCR_ENT 00078774, UCR_ENT 00078775) (SDNH); 9 September 1951, R. G. Robinson, 1♂ (UCR_ENT 00086607) (LACM). Box Canyon Road, 31.78305°N, 110.83833°W, 21 Aug 1977, Gerald Jewell, 1♂ (UCR_ENT 00079457), 2♀ (UCR_ENT 00098939, UCR_ENT 00098940) (CAS). Box Canyon, Santa Rita Mts., 31.80175°N, 110.80786°W, 8/27/1980, R. H. Crandall, 1♀ (UCR_ENT 00095681) (LACM). Browns Cyn., Baboquivari Mts., 31.75667°N, 111.51917°W, 01 Sep 1957 - 02 Sep 1957, E. L. Westcott, 1♂ (UCR_ENT 00086650) (LACM). Florida Canyon, Santa Rita Mountains, 31.77453°N,

110.86786°W, 10 Aug 1924, E. P. Van Duzee, 1 Juvenile sex unknown (UCR_ENT 00047755) (CAS). Florida Wash, 31.78193°N, 110.88699°W, 21 Aug 1979, D. K. Faulkner, 1♂ (UCR_ENT 00025227) (SDNH). Green Valley, 31.80000°N, 111.05000°W, 10/2/1992, Unknown, 1♀ (UCR_ENT 00095679) (LACM). Madera Canyon, Santa Rita Mountains, 31.74196°N, 110.88526°W, 23 Sep 1974, J. Denk, 1♂ (UCR_ENT 00025185) (SDNH); 28 Sep 1974, J. Denk, 1♀ (UCR_ENT 00078768) (SDNH). Santa Rita Mountains, Madera Canyon, 31.72784°N, 110.88061°W, 9/7/1966, Unknown, 1♂ (UCR_ENT 00095749) (LACM). Sta. Rita Mts, Madera Canyon, S of Tucson, 31.72509°N, 110.88008°W, 10 Oct 1959, Fred Thorne, 1♂ (UCR_ENT 00078794) (SDNH). Tucson, 32.22167°N, 110.92647°W, 09 Aug 1940, Timberlake, 1♂ (UCR_ENT 00066297), 1♀ (UCR_ENT 00066296) (UCR). Tucson, 32.22167°N, 110.92639°W, 30 Aug 1955, P. S. Bartholomew, 1♂ (UCR_ENT 00079492) (CAS). **Pinal Co.:** 1 mi. W Oracle, 32.61314°N, 110.83551°W, 13 Aug 1961, M. J. Wargo, 1♀ (UCR_ENT 00065921) (UCR). **Santa Cruz Co.:** 28 Miles N Sonoita, 32.08593°N, 110.65535°W, 9 September 1962, A. P. Aschwanden, 1♀ (UCR_ENT 00095704) (LACM). 7 mi W of Duquesne, 31.36996°N, 110.80483°W, 12 Sep 1954, Timberlake, 2♂ (UCR_ENT 00066227, UCR_ENT 00066228) (UCR). 7 mi. W of Fairbank, 31.72262°N, 110.30703°W, 28 Aug 1954, Timberlake, 1♂ (UCR_ENT 00066224), 2♀ (UCR_ENT 00066225, UCR_ENT 00066226) (UCR). At junction of Route 80 & Rucker Canyon road at tank., 31.59397°N, 109.23956°W, 21 Sep 1970, P. S. Bartholomew, 2♂ (UCR_ENT 00079485, UCR_ENT 00079486), 2♀ (UCR_ENT 00098919, UCR_ENT 00098920) (CAS). Hwy 83, 31.55697°N, 110.55144°W, 13 Aug 2014, C. Weirauch, J. Heraty, K. Barao, P. Masonick, 10♂ (UCR_ENT 00104939, UCR_ENT 00104943-UCR_ENT 00104946, UCR_ENT 00110074, UCR_ENT 00113537-UCR_ENT 00113538, UCR_ENT 00113541, UCR_ENT 00113543), 14♀ (UCR_ENT 00104937-UCR_ENT 00104938, UCR_ENT 00104940-UCR_ENT 00104942, UCR_ENT 00104947-UCR_ENT 00104948, UCR_ENT 00110072-UCR_ENT 00110073, UCR_ENT 00113539-UCR_ENT 00113540, UCR_ENT 00113542, UCR_ENT 00113544, UCR_ENT 00113545) (UCR). Hwy. 82 9 mi. E. Cochise Co., 31.70397°N, 110.58704°W, 03 Sep 1961, R. L. Macdonald, 1♂ (UCR_ENT 00065883), 1♀ (UCR_ENT 00065882) (UCR). Madera Canyon, Santa Rita Mountains, 31.72500°N, 110.87944°W, 8/20/1946, J. A. Comstock, 1♂ (UCR_ENT 00095733) (LACM). Patagonia, 31.53954°N, 110.75619°W, 3 September 1953, Lloyd Martin, 1♂ (UCR_ENT 00086651) (LACM). Pena Blanca, 31.25010°N, 111.04440°W, 04 Sep 1975, Edward S. Ross, 1♂ (UCR_ENT 00079491), 1♀ (UCR_ENT 00047757) (CAS); 13 Jul 1900, E. P. Van Duzee, 2♀ (UCR_ENT 00047758, UCR_ENT 00047759) (CAS). Pena Blanca Lake, 31.40917°N, 111.08472°W, 9/15/1969, T. Halstead, 2♀ (UCR_ENT 00095664, UCR_ENT 00095665) (LACM). Pena Blanca, Upper White Rock Campground, 31.39400°N, 111.08967°W, 08 Sep 2017, P. Masonick, 1♂ (UCR_ENT 00127517) (UCR). Sonoita, 31.67944°N, 110.65472°W, 09 Aug 1924, J. O. Martin, 1♂ (UCR_ENT 00046317) (CAS). Tumacacori Mountains, 31.55759°N, 111.12092°W, 9/1/1931, I. Wilson, 1♂ (UCR_ENT 00095732) (LACM). White Rock Forest Camp, Route 289, 16 mi NW. Nogales, 31.39815°N, 111.08925°W, 24 Sep 1968, P.S. Bartholomew, 1♂ (UCR_ENT 00079484), 5♀ (UCR_ENT 00098944-UCR_ENT 00098946, UCR_ENT 00098959, UCR_ENT 00098960) (CAS). **Yavapai Co.:** 15 mi NE of Prescott, 34.66400°N, 112.24200°W, 06 Sep 1962, R. L. Macdonald, 1♀ (UCR_ENT 00065926) (UCR). 4 mi N of Prescott, 34.59679°N, 112.46741°W, 02 Aug 1970, Bob Duff, 1♂ (UCR_ENT 00095747) (LACM); 3 August 1970, Bob Duff, 1♂ (UCR_ENT 00095748) (LACM). 4 miles N Prescott, 34.70925°N, 112.45562°W, 8/2/1970, Bob Duff, 5♂ (UCR_ENT 00086644-UCR_ENT 00086648) (LACM); 8/3/1970, Bob Duff, 1♀ (UCR_ENT 00095683) (LACM). 5 mi S Jerome, 34.65674°N, 112.11151°W, 27 Aug 1968, L. S. Hawkins, 1♂ (UCR_ENT 00079717), 2♀ (UCR_ENT 00079645, UCR_ENT 00079646) (WFBM). Bloody Basin, 34.17476°N, 111.80376°W, 04 Sep 1944, R. A. Flock, 1♂ (UCR_ENT 00065911) (UCR). Cherry, 34.58810°N, 112.04110°W, 31 Aug 1937, R. P. Allen, 1♂ (UCR_ENT 00079290) (CAS). Chino Valley, 34.75750°N, 112.45306°W, 06 Aug 1973, Unknown, 1♂ (UCR_ENT 00065899), 1♀ (UCR_ENT 00065900) (UCR). Dewey, 34.53000°N, 112.24060°W, 12/29/1969, R. Hancock, 1♀ (UCR_ENT 00095659) (LACM); 29 Jul 1969, R. Hancock, 1♂ (UCR_ENT 00096323) (LACM). Granite Dell, 34.69556°N, 112.40861°W, 29 August 1966, D. Richman, 1♂ (UCR_ENT 00086638) (LACM). Granite Dells 4 Miles N Prescott, 34.59805°N, 112.46850°W, 27 August 1970, Lloyd M. Martin, 5♂ (UCR_ENT 00095727-UCR_ENT 00095731), 7♀ (UCR_ENT 00095686-UCR_ENT 00095692) (LACM); 5 August 1970, Lloyd M. Martin, 5♀ (UCR_ENT 00095693-UCR_ENT 00095697) (LACM). Granite Dells, 4 mi N of Prescott, 34.60600°N, 112.41100°W, 05 Aug 1970, Lloyd M. Martin, 6♂ (UCR_ENT 00086608-UCR_ENT 00086609, UCR_ENT 00086629-UCR_ENT 00086632) (LACM); 27 August 1970, Lloyd M. Martin, 3♂ (UCR_ENT 00086610-UCR_ENT 00086611, UCR_ENT 00086637) (LACM); 20 August 1970, Lloyd M. Martin, 3♂ (UCR_ENT 00086612-UCR_ENT 00086614), 2♀ (UCR_ENT 00095698, UCR_ENT 00095701) (LACM); 25 August 1970, Lloyd M. Martin, 1♂ (UCR_ENT 00086615), 1♀ (UCR_ENT 00095700) (LACM); 26 August 1970, Lloyd M. Martin, 4♂ (UCR_ENT 00086616-UCR_ENT 00086619), 2♀ (UCR_ENT 00095710, UCR_ENT 00095711) (LACM); 3 August 1970, Lloyd M. Martin, 3♂ (UCR_ENT 00086633-UCR_ENT 00086635), 1♀ (UCR_ENT 00095699) (LACM); 19 July 1970, Lloyd M. Martin, 1♂ (UCR_ENT 00086636) (LACM). Highway 40, vic. Seligman, Exit 109, Anvil Rock Road, 35.28966°N, 113.08731°W, 07 Aug 1985, P. H. Arnaud, Jr., 1♂ (UCR_ENT 00079288) (CAS). Mingus Mountains, 34.69390°N, 112.12690°W, 02 Aug 1959, Unknown, 1♂ (UCR_ENT 00065992) (UCR); 02 Sep 1959, Unknown, 2♂ (UCR_ENT 00067531, UCR_ENT 00067532) (UCR). Near Del Rio Verde River, 34.86389°N, 112.46083°W, 18 Sep 1929, J. A. Kusche & E. C. Van Dyke, 1♂ (UCR_ENT 00046327) (CAS). Prescott, 34.54000°N, 112.46778°W, 07 Jul 1917, C. A. Hill, 8♂ (UCR_ENT 00046309-UCR_ENT 00046315, UCR_ENT 00047749) (CAS); VIII-1910, J. A. Kusche, 1♂ (UCR_ENT 00046316) (CAS); 06 Aug 1910, J. A. Kusche, 3♂ (UCR_ENT 00047746-UCR_ENT 00047748), 2♀ (UCR_ENT 00047767, UCR_ENT 00047768) (CAS); 13 Jul 1917, C. A. Hill, 1♀ (UCR_ENT 00047791) (CAS); 12 Jul 1917, C. A. Hill, 2♀ (UCR_ENT 00047792, UCR_ENT 00047793) (CAS); 29 Jul 1954, L. D. Anderson, 1♂ (UCR_ENT 00065990) (UCR); 19 Sep 1953, Timberlake, 1♀ (UCR_ENT 00066289) (UCR); 29 Aug 1925, W W J, 1♀ (UCR_ENT 00078769) (SDNH); 31 Aug 1937, R. P. Allen, 2♂ (UCR_ENT 00079291, UCR_ENT 00079292), 1♀ (UCR_ENT 00079320) (CAS); 25 Jun 1954, D. Evans, 1♂ (UCR_ENT 00079719) (WFBM). S Hillside, 34.41836°N, 112.91712°W, 01 Oct 1980, Art Strong, 1♀ (UCR_ENT 00065905) (UCR); 18 Sep 1980, Art Strong, 3♂ (UCR_ENT 00065906-UCR_ENT 00065908), 1♀ (UCR_ENT 00065909) (UCR). S Yarnell, 34.22169°N, 112.74740°W, 01 Oct 1980, Art Strong, 4♂ (UCR_ENT 00065901-UCR_ENT 00065904), 1♀ (UCR_ENT 00061683) (UCR). S. Yavapai Co., 34.08737°N, 112.39456°W, 04 Jun 1910, J. A. Kusche, 1♀ (UCR_ENT

00046332) (CAS); 07 Jun 1910, J. A. Kusche, 5♂ (UCR_ENT 00046599-UCR_ENT 00046600, UCR_ENT 00046698-UCR_ENT 00046699, UCR_ENT 00047931), 4♀ (UCR_ENT 00047762-UCR_ENT 00047765) (CAS); 20 Jun 1910, J. A. Kusche, 4♂ (UCR_ENT 00047927-UCR_ENT 00047930), 1♀ (UCR_ENT 00047766) (CAS). Yarnell, 34.22167°N, 112.74632°W, 21 Aug 1967, J. C. Hall, 1♂ (UCR_ENT 00061682) (UCR). near seligman, 35.32556°N, 112.87740°W, 29 Aug 1931, Timberlake, 1♀ (UCR_ENT 00065825) (UCR). **Yuma Co.:** 15 mi E of Yuma, 32.72500°N, 114.36490°W, 7/23/1966, Unknown, 1♀ (UCR_ENT 00095654) (LACM). Yuma, 32.72533°N, 114.62439°W, Jun, Unknown, 3♂ (UCR_ENT 00046318-UCR_ENT 00046320) (CAS). Yuma County, no specific locality, 32.72528°N, 114.62361°W, June, E. P. Van Duzee, 1♀ (UCR_ENT 00046596) (CAS). **unknown Co.:** Arizona, 34.35233°N, 111.49290°W, No date provided, Unknown, 1♀ (UCR_ENT 00047796) (CAS). Santa Rita Mts, 31.82592°N, 110.77480°W, 20 Sep 1933, Bryant, 1♂ (UCR_ENT 00047754) (CAS). Upper Cave Creek Canyon, Chiricahua Mts., 31.89620°N, 109.16367°W, 29 Aug 1957, W. F. Barr, 9♂ (UCR_ENT 00079586-UCR_ENT 00079594), 6♀ (UCR_ENT 00079625-UCR_ENT 00079630) (WFBM). unknown, 34.14605°N, 111.47020°W, 23 Sep 1964, Timberlake, 1♂ (UCR_ENT 00067574) (UCR). **Colorado: Boulder Co.:** Boulder, (F. 4405), About., 40.00000°N, 105.25000°W, 07 Aug 1919 - 12 Aug 1919, Unknown, 1♂ (UCR_ENT 00079547) (WFBM). **El Paso Co.:** Colorado Springs, 38.83190°N, 104.82260°W, August, E. S. Tucker, 1♀ (UCR_ENT 00095703) (LACM). Colorado Springs, 38.86333°N, 104.79194°W, 8/10/1963, Unknown, 2♂ (UCR_ENT 00095757, UCR_ENT 00095758) (LACM). Colorado Springs, nr Gold Camp Reservoir, 38.79694°N, 104.87194°W, 12 Aug 2017, A. Baker & L. Kresslein, 1♂ (UCR_ENT 00127451), 1♀ (UCR_ENT 00127450) (UCR). Cragmor, 38.89126°N, 104.81340°W, 06 Aug 1929, Clinton G. Abbott, 1♂ (UCR_ENT 00078764), 1♀ (UCR_ENT 00078767) (SDNH). Manitou Springs, Intemann Tr., 38.85500°N, 104.92306°W, 12 Aug 2017, A. Baker & L. Kresslein, 1♀ (UCR_ENT 00127452) (UCR). Stratton Open Space, 38.79500°N, 104.86000°W, 11 Aug 2017, A. Baker & L. Kresslein, 1♀ (UCR_ENT 00127514) (UCR). **Garfield Co.:** 20 mi. N. W. of Rifle, 39.78135°N, 107.58810°W, 24 Aug 1976, Unknown, 1♂ (UCR_ENT 00066704) (UCR). **Jefferson Co.:** Deer Creek Canyon Park, 39.54361°N, 105.15028°W, 25 Jul 2012, D. Yanega, 2♂ (UCR_ENT 00088108, UCR_ENT 00088109), 2♀ (UCR_ENT 00092921, UCR_ENT 00092922) (UCR). Lakewood, 39.70639°N, 105.10278°W, 29 August 1987, Richard S. Peigler, 1♂ (UCR_ENT 00095744) (LACM). **La Plata Co.:** Bayfield, 37.22427°N, 107.60220°W, 03 Sep 1921, C. D. Duncan, 1♂ (UCR_ENT 00046285) (CAS). **Larimer Co.:** Fort Collins, 40.58528°N, 105.08389°W, 10 Oct 1972, W. C. Shuster, 1♀ (UCR_ENT 00079657) (WFBM). **Lincoln Co.:** 17 mi S of Limon, 39.01447°N, 103.69395°W, 25 July 1968, R. R. & R. A. Snelling, 2♂ (UCR_ENT 00095761, UCR_ENT 00095762) (LACM). **Mesa Co.:** Grand Junction, about., 39.06667°N, 108.56667°W, 03 Aug 1920, Unknown, 1♀ (UCR_ENT 00079656) (WFBM). **Montezuma Co.:** Mesa Verde (now goes by the name of Mesa Verde National Park), 37.18388°N, 108.48861°W, 11 Aug 1950, L. D. Anderson, 1;u (UCR_ENT 00061687), 3♂ (UCR_ENT 00061688-UCR_ENT 00061690), 11♀ (UCR_ENT 00061686, UCR_ENT 00061691-UCR_ENT 00061700) (UCR). **Montrose Co.:** 10 mi E Naturita, 38.21941°N, 108.38300°W, 8 August 1970, S. L. Ellis & O. Shields, 2♂ (UCR_ENT 00095754, UCR_ENT 00095755) (LACM). **Morgan Co.:** Brush 13.9 Miles S, 40.06281°N, 103.61160°W, 8/25/1968, R. R. & R. A. Snelling, 2♂ (UCR_ENT 00095759, UCR_ENT 00095760), 1♀ (UCR_ENT 00095702) (LACM). **Yuma Co.:** 15 mi E Yuma, 40.12380°N, 103.01250°W, 8/23/1966, Unknown, 2♂ (UCR_ENT 00095750, UCR_ENT 00095751) (LACM). 5 mi NW Joes, 39.71096°N, 102.74114°W, 25 Aug 1969, R. C. Biggam, 2♀ (UCR_ENT 00079654, UCR_ENT 00079655) (WFBM). Unknown, 38.99043°N, 105.48649°W, no date provided, E. P. VanDuzee Collection, Unknown, 1♀ (UCR_ENT 00046595) (CAS). **unknown Co.:** Colorado, 38.99427°N, 105.51220°W, No date provided, Unknown, 20♂ (UCR_ENT 00047769-UCR_ENT 00047788) (CAS); no date provided, Unknown, 14♀ (UCR_ENT 00047797-UCR_ENT 00047810) (CAS). **Illinois: Cambridge Co.:** Cambridge, 41.00506°N, 90.00322°W, July 31, 1932, Unknown, 1♂ (UCR_ENT 00086564) (LACM). **Champaign Co.:** Champaign County, 40.14008°N, 88.19919°W, 21 Sep 1964, J. D. Pinto, 1♂ (UCR_ENT 00066744) (UCR). **Cook Co.:** Chicago, 41.85000°N, 87.65000°W, VIII, C. T. Brues, 1♂ (UCR_ENT 00046197) (CAS). **Kane Co.:** Elgin: 38W668 Ridgewood Ln., 42.06320°N, 88.37372°W, 01 Aug 2014, P. Masonick, 1♂ (UCR_ENT 00104949), 1♀ (UCR_ENT 00113547) (UCR). Saint Charles: Leroy Oaks Forest Preserve, Horlock Prairie, 41.92065°N, 88.34833°W, 01 Aug 2014, P. Masonick, 2♂ (UCR_ENT 00104950, UCR_ENT 00113548) (UCR). **Lake Co.:** Barrington, 42.15389°N, 88.13611°W, 03 Sep 2013, Unknown, 6♂ (UCR_ENT 00104867-UCR_ENT 00104870, UCR_ENT 00104872, UCR_ENT 00104874), 3♀ (UCR_ENT 00104866, UCR_ENT 00104871, UCR_ENT 00104873) (UCR). **Lee Co.:** Nachusa Grasslands, 41.89440°N, 89.37232°W, 29 Jul 2017, P. Masonick & C. Dodge, 6♂ (UCR_ENT 00127504-UCR_ENT 00127509), 5♀ (UCR_ENT 00127499-UCR_ENT 00127503) (UCR). **Will Co.:** New Lenox, 41.51198°N, 87.96561°W, 04 Oct 1947, H. D. Heath, 1♀ (UCR_ENT 00046268) (CAS). **Iowa: Crawford Co.:** Denison, 42.02499°N, 95.35889°W, 08 Sep 1965, P. S. Bartholomew, 1♀ (UCR_ENT 00046269) (CAS). **Emmetsburg Co.:** Emmetsburg, 43.00185°N, 94.01137°W, 7/2/1924, Ballou, 1♀ (UCR_ENT 00086592) (LACM). **Johnson Co.:** Iowa City, 41.66111°N, 91.53000°W, 14 Sep 1915, Stoner, 1♂ (UCR_ENT 00046193) (CAS). **Lucas Co.:** Chariton, 41.01603°N, 93.30761°W, 20 Jul 1914, D. Stoner, 1♀ (UCR_ENT 00046271) (CAS). **Story Co.:** Ames, 42.05812°N, 93.62673°W, 15 Jul 1964, L. E. O'Keefe, 1♂ (UCR_ENT 00079534) (WFBM). **Winneshiek Co.:** Decorah, 43.30330°N, 91.78570°W, 11 Sep 2016, J. Masonick, 1♀ (UCR_ENT 00127513) (UCR). **Kansas: Atchison Co.:** Effingham, 39.52220°N, 95.40060°W, Jul 1900, E. P. Van Duzee, 3♂ (UCR_ENT 00046185-UCR_ENT 00046187), 2♀ (UCR_ENT 00046210, UCR_ENT 00046216) (CAS). **Maine: Portland Co.:** Ogunquit Beach, 43.25583°N, 70.59167°W, 1/31/1960, Greg Ahearn, 1♂ (UCR_ENT 00086567) (LACM); 7/31/1960, Greg Ahearn, 2♂ (UCR_ENT 00086568, UCR_ENT 00086569), 3♀ (UCR_ENT 00086593-UCR_ENT 00086595) (LACM). **Massachusetts: Nantucket Co.:** Nantucket, 41.28333°N, 70.09944°W, 10 Sep 1907, H. T. Fernald, 1♂ (UCR_ENT 00046257) (CAS). **Michigan: Harbor Beach Co.:** Harbor Beach, 43.01400°N, 82.01083°W, August 3, 1973, D. Clark, 1♀ (UCR_ENT 00086591) (LACM). **Kalamazoo Co.:** Gull Lake, 42.39970°N, 85.41140°W, 21 Aug 1959, L. D. Anderson, 1♂ (UCR_ENT 00066700) (UCR). **Washtenaw Co.:** Ann Arbor, 42.27793°N, 83.73059°W, 28 Aug 1963, D. C. and K. A. Rentz, 1♀ (UCR_ENT 00046272) (CAS). **Minnesota: Anoka Co.:** 1.5 mi SW of Centerville, 45.15231°N, 93.08247°W, 05 Aug 1991, J. B. Johnson, 2♂ (UCR_ENT 00080156, UCR_ENT 00080157) (WFBM). Anoka count, no specific locality, 45.20923°N, 93.38707°W, 5/13/1968, R. Lundberg, 1♂ (UCR_ENT 00086566), 1♀ (UCR_ENT 00086596) (LACM). **Montana: Carter Co.:** 25 mi S of Eklaka, 45.58986°N, 104.37215°W, 22 Aug 1971, P. MacKay, 1♂ (UCR_ENT

00067530), 1♀ (UCR_ENT 00067529) (UCR). **Cascade Co.:** By Missouri river, 9.5 mi NE Craig, 47.17154°N, 111.82054°W, 22 Aug 1969, H. B. Leech, 1♂ (UCR_ENT 00079506) (CAS). **Fallon Co.:** 10 mi. W. of Willard, 46.19508°N, 104.56788°W, 20 Aug 1971, W. P. Mackay, 1♀ (UCR_ENT 00061681) (UCR); 12 Aug 1971, W. P. Mackay, 1♂ (UCR_ENT 00061701), 2♀ (UCR_ENT 00061702, UCR_ENT 00061703) (UCR). **Fergus Co.:** Lewistown, 47.06247°N, 109.42820°W, 15 August 1973, R. W. Pemberton, 1♂ (UCR_ENT 00080158), 1♀ (UCR_ENT 00080187) (WFBM). **Roosevelt Co.:** Wolf Point, 48.09139°N, 105.64250°W, 21 Aug 1954, P. S. Bartholomew, 2♂ (UCR_ENT 00079504, UCR_ENT 00079505) (CAS). **Wibaux Co.:** Wibaux, 46.98500°N, 104.18778°W, 25 Aug 2009, J. D. Pinto, 2♂ (UCRC_ENT 00269087, UCRC_ENT 00269088), 1♀ (UCRC_ENT 00269089) (UCR). **Nebraska: Hall Co.:** Grand Island, 40.92500°N, 98.34167°W, 1963, HJL, 1♀ (UCR_ENT 00046329) (CAS). **Lancaster Co.:** Sprague, 40.62528°N, 96.74556°W, 07 Aug 1969, R. J. Luedtke, 1♂ (UCR_ENT 00079716), 1♀ (UCR_ENT 00079660) (WFBM). **New Hampshire: Belknap Co.:** Barnstead, 43.33389°N, 71.29300°W, 04 Sep 1928, F. E. Blaisdell, 7♂ (UCR_ENT 00046218-UCR_ENT 00046224), 1♀ (UCR_ENT 00046240) (CAS); 11 Sep 1928, F. E. Blaisdell, 2♀ (UCR_ENT 00046238, UCR_ENT 00046239) (CAS). Laconia, 43.56361°N, 71.47495°W, June 1961, Herbert Little, 1♂ (UCR_ENT 00046259) (CAS). **Hillsborough Co.:** New Ipswich, 42.74806°N, 71.85417°W, 15 Aug 1933, H. W. Smith, 2♂ (UCR_ENT 00079526, UCR_ENT 00079527), 2♀ (UCR_ENT 00079542, UCR_ENT 00079543) (WFBM); 29 Aug 1933, H. W. Smith, 1♂ (UCR_ENT 00079528) (WFBM); 07 Aug 1933, H. W. Smith, 1♂ (UCR_ENT 00079529) (WFBM); 22 Aug 1936, H. W. Smith, 1♂ (UCR_ENT 00079530), 1♀ (UCR_ENT 00079539) (WFBM); 25 Aug 1936, H. W. Smith, 1♂ (UCR_ENT 00079531), 1♀ (UCR_ENT 00079540) (WFBM); 30 Aug 1936, H. W. Smith, 1♂ (UCR_ENT 00079532), 1♀ (UCR_ENT 00079541) (WFBM). **Merrimack Co.:** Contoocook, 43.22194°N, 71.71444°W, 7/8/1925, E. & G. Wheeler, 1♂ (UCR_ENT 00086565) (LACM); 8/23/1928, E. & G. Wheeler, 1 Mixed (UCR_ENT 00086581) (LACM); 8/25/1922, E. & G. Wheeler, 1 Mixed (UCR_ENT 00086582) (LACM); 9/10/1920, E. W. Hall, 1♀ (UCR_ENT 00086584) (LACM); August 23, 1919, Unknown, 1♀ (UCR_ENT 00086585) (LACM). Pittsfield, 43.30420°N, 71.32004°W, 01 Sep 1928, F. E. Blaisdell, 13♂ (UCR_ENT 00046225-UCR_ENT 00046237), 10♀ (UCR_ENT 00046241-UCR_ENT 00046248, UCR_ENT 00046263, UCR_ENT 00046264) (CAS). **Strafford Co.:** Durham, 43.13555°N, 70.93111°W, 15 Aug 1950, H. W. Smith, 1;u (UCR_ENT 00079536), 7♂ (UCR_ENT 00079519-UCR_ENT 00079525), 1♀ (UCR_ENT 00079544) (WFBM). **New Mexico: Bernalillo Co.:** Albuquerque, 35.08444°N, 106.65056°W, no date provided, McConnell, 2♂ (UCR_ENT 00079511, UCR_ENT 00079512), 2♀ (UCR_ENT 00098909, UCR_ENT 00098910) (CAS). **Catron Co.:** HWY. 180, 25-26 mi. markers, 33.62752°N, 108.89491°W, 17 Aug 1985, A. Strong, 3♂ (UCR_ENT 00065933-UCR_ENT 00065935), 1♀ (UCR_ENT 00065936) (UCR). **Colfax Co.:** Koehler, 36.86278°N, 104.47333°W, VIII, H. F. Wickham, 1♀ (UCR_ENT 00047794) (CAS). **Dona Ana Co.:** 2 mi E of Mesilla Park, 32.27584°N, 106.73235°W, 30 Sep 1962, Timberlake, 2♂ (UCR_ENT 00066282, UCR_ENT 00066283), 2♀ (UCR_ENT 00066284, UCR_ENT 00066285) (UCR). 22 mi W. Las Cruces, 32.30847°N, 107.15486°W, 20 Aug 1968, G. R. Noonan, 3♂ (UCR_ENT 00065987-UCR_ENT 00065988, UCR_ENT 00066742) (UCR). 3 mi E of Mesilla Park, 32.28600°N, 106.71200°W, 13 Sep 1957, Timberlake, 1♂ (UCR_ENT 00066293), 1♀ (UCR_ENT 00066295) (UCR); 07 Sep 1961, Timberlake, 1♀ (UCR_ENT 00066294) (UCR). 6.5 mi E of Las Cruces, 32.31290°N, 106.66690°W, 01 Oct 1962, F. S. Carr, 1♀ (UCR_ENT 00066308) (UCR). 8.4 mi W of Los Cruces, 32.31127°N, 106.92220°W, 09 Aug 1962, Timberlake, 1♂ (UCR_ENT 00066309) (UCR). Dripping Springs, Las Cruces, 32.32259°N, 106.57194°W, 13 Sep 2009, I. J. Park, 1♂ (UCR_ENT 00079721) (WFBM). Hwy 136 at mile 7 marker, 31.87528°N, 106.66722°W, 03 Sep 2016, G. Ballmer, 2♂ (UCR_ENT 00127515, UCR_ENT 00127516) (UCR). Las Cruces, 32.31222°N, 106.77778°W, 07 Oct 1991, J. B. Johnson, 1♂ (UCR_ENT 00079585), 1♀ (UCR_ENT 00079648) (WFBM). jct. West Afton Rd. & Black Mt. Rd., 32.09083°N, 106.77944°W, 14 Sep 2008, G. R. Ballmer, 1♀ (UCRC_ENT 00278832) (UCR). **Eddy Co.:** 4 mi S Loving, 32.22175°N, 104.09577°W, 19 Jun 1968, S. M. Hogue & R. L. Penrose, 1♂ (UCR_ENT 00079572), 2♀ (UCR_ENT 00079640, UCR_ENT 00079641) (WFBM). Carlsbad, 32.42056°N, 104.22833°W, 12 Jul 1942, E. C. Van Dyke, 1♀ (UCR_ENT 00098907) (CAS). **Grant Co.:** 13 Miles NE Lordsburg, 32.45210°N, 108.50563°W, 25 September 1970, D. P. Levin, 3♂ (UCR_ENT 00086626-UCR_ENT 00086628) (LACM). Big Dry Creek, 33.21868°N, 108.89061°W, 10 Sep 1933, H. S. Gentry, 1♂ (UCR_ENT 00046287), 1♀ (UCR_ENT 00046598) (CAS). **Hidalgo Co.:** 13 Miles NW Lordsburg, 32.48072°N, 108.87269°W, 8/8/1959, L. A. Stange & A. S. Menke, 3♂ (UCR_ENT 00086623-UCR_ENT 00086625) (LACM). 13 Miles NW Lordsburg, 32.48895°N, 108.87817°W, 8/8/1959, L. A. Stange & A. S. Menko, 1♀ (UCR_ENT 00095653) (LACM). 15 mi. NE Lordsburg, 32.50416°N, 108.52645°W, 13 Sep 1978, G. Gordh, 1♂ (UCR_ENT 00067536) (UCR). 4 mi. SW Lordsburg, 32.29964°N, 108.76600°W, no date provided, Ernest R. Tinkham, 1♀ (UCR_ENT 00098906) (CAS). 4.3 mi. S Road Forks, 32.17740°N, 108.95283°W, 25 Aug 1974 - 03 Sep 1974, J. D. Pinto, 1♂ (UCR_ENT 00061680) (UCR). Antelope Corral, 6 mi N of Rodeo, 31.92605°N, 109.01024°W, 04 Oct 1984, H. A. Hespeneheide, 1♂ (UCR_ENT 00092920) (UCR). Peloncillo Mts., Granite Gap, 32.08861°N, 108.97306°W, 12 Sep 1985, W. F. Barr, 1♂ (UCR_ENT 00079718) (WFBM). Post Office Cyn. Peloncillo Mts., 31.74426°N, 109.04228°W, 14 Aug 1965, M. E. Erwin, 2♂ (UCR_ENT 00065931, UCR_ENT 00065932), 1♀ (UCR_ENT 00061674) (UCR). Rodeo, 31.83528°N, 109.03056°W, 8/15/1971, Bob Duff, 2♂ (UCR_ENT 00086597, UCR_ENT 00086598) (LACM). Rodeo, 31.82298°N, 109.02706°W, 8/15/1971, Bob Duff, 2♀ (UCR_ENT 00095684, UCR_ENT 00095712) (LACM). State Line Road, 31.85193°N, 109.04926°W, 28 Jun 1976, S. Johnson, 1♂ (UCR_ENT 00078763) (SDNH). **Lincoln Co.:** 5 mi S Oscuro, 33.41036°N, 106.07014°W, 15 Sep 1964, R. L. Westcott, 12♂ (UCR_ENT 00079560-UCR_ENT 00079571), 6♀ (UCR_ENT 00079623, UCR_ENT 00079635-UCR_ENT 00079639) (WFBM). 6 mi S Oscuro, 33.82063°N, 105.75831°W, 27 Sep 1962, W. F. Barr, 6♂ (UCR_ENT 00079550-UCR_ENT 00079555), 2♀ (UCR_ENT 00079631, UCR_ENT 00079632) (WFBM). 6 mi. north of Ruidoso, 33.41881°N, 105.67304°W, 27 Jul 1978, G.S. Forbes, 6♂ (UCR_ENT 00025187-UCR_ENT 00025192), 1♀ (UCR_ENT 00078770) (SDNH). Ruidoso, 6 mi. North Montgomery Biological Reserve Station, 33.34362°N, 105.66995°W, 27 Jul 1978, G. Forbes, 1♂ (UCR_ENT 00025224) (SDNH). **Luna Co.:** 6 mi. SE. Deming, 32.19677°N, 107.66259°W, 12 Aug 1975, J. D. Pinto, 1♂ (UCR_ENT 00065989) (UCR). Columbus, 31.82666°N, 107.64556°W, 13 Sep 1978, G. Gordh, 2♂ (UCR_ENT 00066743, UCR_ENT 00067537) (UCR). Rockhound State Park, near Deming, 32.18694°N, 107.61027°W, 29 Aug 1979, Edward S. Ross, 1♂ (UCR_ENT 00079501), 1♀ (UCR_ENT 00098912) (CAS). **Otero Co.:** 2 mi N Three Rivers, 33.35036°N, 106.07490°W, 02 Aug 1983, W. F. Barr, 2♂ (UCR_ENT

00079713, UCR_ENT 00079714) (WFBM). 3 mi W High Rolls, 32.95070°N, 105.88728°W, 25 Sep 1962, W. F. Barr, 1♀ (UCR_ENT 00079649) (WFBM). 3 mi W of Mountain Park, 32.95064°N, 105.87640°W, 25 Aug 1951, E. L. Kessel, 1♂ (UCR_ENT 00046321) (CAS). Three Rivers, 33.30500°N, 106.07500°W, 25 Sep 1962, W. F. Barr, 1♂ (UCR_ENT 00079712) (WFBM). **Roosevelt Co.:** Oasis State Park, near Portales, 34.25777°N, 103.35250°W, 30 Aug 1979, E. S. Ross, 1♀ (UCR_ENT 00098914) (CAS). Portales, 34.18210°N, 103.33021°W, 24 Aug 1938, R. P. Allen, 3♂ (UCR_ENT 00046324-UCR_ENT 00046326), 2♀ (UCR_ENT 00046330, UCR_ENT 00046331) (CAS). **San Juan Co.:** 33 mi S of Shiprock, 36.28473°N, 108.70592°W, 14 Sep 1970, P. S. Bartholomew, 1♂ (UCR_ENT 00046275), 1♀ (UCR_ENT 00098942) (CAS). Shiprock, 36.78555°N, 108.68694°W, 16 Sep 1938, I. McCracken, 1♂ (UCR_ENT 00047745) (CAS). **Sandoval Co.:** 2 mi N San Ysidro, 35.59794°N, 106.76991°W, 09 Sep 1969, R. L. Penrose, 1♀ (UCR_ENT 00079674) (WFBM). **Santa Fe Co.:** 5 mi. NE Santa Fe, 35.74481°N, 105.85696°W, 17 Sep 1964, R. L. Westcott, 1♂ (UCR_ENT 00079549) (WFBM). Santa Fe, 35.68694°N, 105.93722°W, 14 Sep 1961, R. L. Westcott, 1♂ (UCR_ENT 00079715) (WFBM). **Socorro Co.:** Just SW of Tres Montosos, 14 mi W Magdalena, Route 60, 34.09670°N, 107.46090°W, 22 Aug 1967, H. B. Leech, 1♂ (UCR_ENT 00079502), 2♀ (UCR_ENT 00098904, UCR_ENT 00098905) (CAS). **Torrance Co.:** Town of Gran Quivira, 34.26361°N, 106.10194°W, 19 Aug 1967, H. B. Leech, 2♂ (UCR_ENT 00079499, UCR_ENT 00079500), 1♀ (UCR_ENT 00098913) (CAS). New Mexico, 34.36030°N, 106.20397°W, no date provided, Unknown, 1♀ (UCR_ENT 00047795) (CAS). **unknown Co.:** 5 mi W Benx, 33.15812°N, 105.94349°W, 24 Sep 1967, W. F. Barr, 2♂ (UCR_ENT 00079545, UCR_ENT 00079546) (WFBM). **New York: Schoharie Co.:** Cobleskill, SUNY Cobleskill Farm, 42.67084°N, 74.50042°W, 08 Sep 2000, K. L. Wise, 1♀ (UCR_ENT 00079537) (WFBM). **Tompkins Co.:** Ithaca, 42.44056°N, 76.49694°W, 07 Sep 1953, Unknown, 1♀ (UCR_ENT 00046267) (CAS). **North Dakota: Kidder Co.:** Steele, 46.85471°N, 99.91594°W, 20 Aug 1964, P. H. Arnaud Jr., 4♂ (UCR_ENT 00046249-UCR_ENT 00046252) (CAS). **Ramsey Co.:** Penn, 48.22165°N, 99.08912°W, 20 Aug 1954, P. S. Bartholomew, 4♂ (UCR_ENT 00046253-UCR_ENT 00046256), 1♀ (UCR_ENT 00046266) (CAS). **Ransom Co.:** Ransom County, 46.44189°N, 97.68555°W, 01 Aug 1961, M. Brusven, 1♀ (UCR_ENT 00080186) (WFBM). **Oklahoma: Oklahoma Co.:** Oklahoma City, 35.48222°N, 97.53500°W, 22 Dec 1919, Capt. C. Grant, 1♀ (UCR_ENT 00046597) (CAS). **Payne Co.:** Stillwater, 36.11556°N, 97.05806°W, 10 Aug 1993, M. Gates, 1♂ (UCR_ENT 00037505) (UCR); 15 Jul 1994, M. Gates, 3♂ (UCR_ENT 00037506-UCR_ENT 00037508) (UCR). **South Dakota: Brookings Co.:** Brookings, 44.31139°N, 96.79806°W, 24 Jul 1914, H. C. Severin, 1♀ (UCR_ENT 00046211) (CAS). **Codington Co.:** Elmira, 44.93228°N, 97.06924°W, unknown date, Unknown, 1♂ (UCR_ENT 00046190) (CAS). **Roberts Co.:** Sisseton, 45.66468°N, 97.04981°W, 03 Jul 1918 - 04 Jul 1918, Unknown, 1♂ (UCR_ENT 00046192) (CAS). **Texas: Brewster Co.:** 14 mi E of Marathon, 30.20479°N, 103.00899°W, 09 Jul 1958, W. F. Barr, 2♂ (UCR_ENT 00079597, UCR_ENT 00079598) (WFBM). 6 mi E Panther Jct., Big Bend National Park, 29.32070°N, 103.10660°W, 04 Jul 1961 - 06 Jul 1961, R. L. Westcott, 1♀ (UCR_ENT 00095769) (LACM). 7 Mi W Marathon, 30.21390°N, 103.36193°W, 6/21/1961, R. L. Westcott, 1♂ (UCR_ENT 00095742) (LACM). Big Bend National Park, 29.56527°N, 103.26055°W, 8/5/1961, R. L. Westcott, 1♂ (UCR_ENT 00095721) (LACM). Big Bend National Park, Cottonwood Camp, 29.13706°N, 103.52270°W, 04 Oct 1974, J. Denk, 1♂ (UCR_ENT 00025225) (SDNH). Marathon, 30.20500°N, 103.24417°W, 20 Jul 1921, C. D. Duncan, 1♂ (UCR_ENT 00046280) (CAS). Panther Jct. Big Bend National Park, 29.31824°N, 103.20808°W, 7/5/1961, R. L. Westcott, 1♀ (UCR_ENT 00095770) (LACM). **Culberson Co.:** Hwy 54, 25 mi. N. Van Horn, 31.37975°N, 104.83440°W, 22 Sep 1984, Art Strong, 1♂ (UCR_ENT 00065929) (UCR). **Dallam Co.:** Ware, 36.17654°N, 102.69809°W, 27 Aug 1921, C. D. Duncan, 1♂ (UCR_ENT 00046282) (CAS). **Dimmit Co.:** Chaparral Wlf. M. A., 28.32597°N, 99.40755°W, 20 Oct 1979 - 25 Oct 1979, J. Longino, 2♀ (UCR_ENT 00095774, UCR_ENT 00095775) (LACM). Unknown, 28.42253°N, 99.75673°W, 1 October 1978, J. Longino, 1♀ (UCR_ENT 00095776) (LACM). **El Paso Co.:** Hwy 10 E of El Paso, 31.52048°N, 106.13300°W, 31 Aug 2009, C. Weirauch, J. Heraty, 4♂ (UCR_ENT 00071898, UCR_ENT 00071903-UCR_ENT 00071905), 3♀ (UCR_ENT 00071899, UCR_ENT 00071901, UCR_ENT 00071902) (UCR). **Harris Co.:** 3 Miles SW Westfield, 29.98464°N, 95.43387°W, 27 Jun 1961 - 28 Jun 1961, R. L. Westcott, 1♂ (UCR_ENT 00095737), 1♀ (UCR_ENT 00095764) (LACM). **Jackson Co.:** 10 mi NE Pt. Comfort, 28.77869°N, 96.43983°W, 6/29/1961, R. L. Westcott, 1♂ (UCR_ENT 00095743) (LACM). **Jeff Davis Co.:** 16 Miles N Ft. Davis, 30.82775°N, 103.89279°W, 9 July 1961, R. L. Westcott, 1♂ (UCR_ENT 00095741) (LACM). 22 mi N Ft. Davis, 30.91813°N, 103.89187°W, 9 July 1961, R. L. Westcott, 1♀ (UCR_ENT 00095766) (LACM). Hwy. 166 3.5 mi. S. San Antonio Pass, 30.56001°N, 104.27920°W, 21 Sep 1984, Art Strong, 2♀ (UCR_ENT 00065927, UCR_ENT 00065928) (UCR). McDonald Observatory, Davis Mountains, 30.67785°N, 104.01573°W, 29 Aug 2009, C. Weirauch, J. Heraty, 1♀ (UCR_ENT 00071874) (UCR). **Kimble Co.:** Bear Creek, 30.57364°N, 99.86443°W, 07 Oct 1985, Art Strong, 1♀ (UCR_ENT 00065930) (UCR). **Kinney Co.:** Kickapoo Cavern SP, 29.60290°N, 100.45550°W, 26 Jun 2105, P.K. Masonick & A.J. Baker, 2♀ (UCR_ENT 00127521, UCR_ENT 00127522) (UCR). Kickapoo Cavern SP, 29.60220°N, 100.46870°W, 26 Jun 2015, P.K. Masonick & A.J. Baker, 5♂ (UCR_ENT 00127523-UCR_ENT 00127527), 2♀ (UCR_ENT 00127528, UCR_ENT 00127529) (UCR). **Nueces Co.:** Corpus Christi, 27.80028°N, 97.39611°W, 11 Nov 1947, Unknown, 1♂ (UCR_ENT 00025226) (SDNH); 28 Jun 1942, E. S. Ross, 1♀ (UCR_ENT 00098911) (CAS). **Pecos Co.:** Sheffield, 30.69040°N, 101.82260°W, 26 Jul 1921, C. D. Duncan, 1♂ (UCR_ENT 00046281) (CAS). Unknown, 30.78106°N, 102.72350°W, 8/15/05, W. M. Mann, 3♂ (UCR_ENT 00095734-UCR_ENT 00095736), 4♀ (UCR_ENT 00095777-UCR_ENT 00095780) (LACM). **Presidio Co.:** Big Bend SP: Fresno Creek Valley, 29.30270°N, 103.84570°W, 28 Jun 2015, P.K. Masonick & A.J. Baker, 4♂ (UCR_ENT 00127530-UCR_ENT 00127533), 3♀ (UCR_ENT 00127518-UCR_ENT 00127520) (UCR). **Reeves Co.:** Orla, 31.82500°N, 103.90830°W, 22 June 1986, R. S. Miller, 2♂ (UCR_ENT 00095752, UCR_ENT 00095753) (LACM). **Terrell Co.:** Dryden, 30.02410°N, 102.06520°W, 11 Jun 1930, G. Linsley, 1♂ (UCR_ENT 00046276) (CAS). **Uvalde Co.:** Garner State Park, 29.58278°N, 99.73917°W, 22 Jun 1961 - 24 Jun 1961, R. L. Westcott, 2♀ (UCR_ENT 00095767, UCR_ENT 00095768) (LACM). Unknown, 29.35734°N, 99.76220°W, 6/13/1949, D. J. & J. N., 1♀ (UCR_ENT 00095765) (LACM). Uvalde, 29.20944°N, 99.78583°W, 15 Jun 1930, J. O. Martin, 1♀ (UCR_ENT 00046274) (CAS); 15 Jun 1930, G. Linsley, 3♂ (UCR_ENT 00046277-UCR_ENT 00046279) (CAS). **Zapata Co.:** Lopeno, 26.70999°N, 99.10946°W, 03 Jun 1984, Marlin Rice, 1♀ (UCR_ENT 00079659) (WFBM). **Utah: Cache Co.:** Blacksmith Fork Canyon, 41.62097°N, 111.75389°W, 28 Sep 1980, D. R. Frolich & S. Spangler, 1♂ (UCR_ENT

00079606) (WFBM). **Emery Co.:** Huntington, 39.32670°N, 110.96390°W, 07 Sep 1955, N. McFarland, 1♂ (UCR_ENT 00095782) (LACM). **Iron Co.:** 3 mi E Cedar City, 37.67803°N, 113.00615°W, 11 Feb 1971, Unknown, 7♂ (UCR_ENT 00079600-UCR_ENT 00079605, UCR_ENT 00079667), 5♀ (UCR_ENT 00079677-UCR_ENT 00079681) (WFBM); 21 Aug 1971, D. E. Foster, 11♂ (UCR_ENT 00079607-UCR_ENT 00079617), 5♀ (UCR_ENT 00079622, UCR_ENT 00079682-UCR_ENT 00079685) (WFBM). **Salt Lake Co.:** Salt Lake, 40.77457°N, 112.09670°W, 11 Aug 1913, Timberlake, 1♀ (UCR_ENT 00066287) (UCR); 02 Aug 1914, Timberlake, 1♂ (UCR_ENT 00066288) (UCR). **Summit Co.:** Canyons Resort, 40.68596°N, 111.56103°W, 05 Sep 2014, P. Masonick, 1♂ (UCR_ENT 00113550), 1♀ (UCR_ENT 00113551) (UCR). Canyons Resort, 40.68525°N, 111.56128°W, 05 Sep 2014, P. Masonick, 1♀ (UCR_ENT 00113552) (UCR). **Vermont: Chittenden Co.:** Shelburne, 44.38056°N, 73.22806°W, 01 Aug 1951, O. Bryant, 3♂ (UCR_ENT 00046260-UCR_ENT 00046262), 1♀ (UCR_ENT 00046270) (CAS). **Wisconsin: Dane Co.:** Madison, Grady Tract, 43.07450°N, 89.40369°W, 24 Sep 1954, T.A. Ebert, 1♀ (UCR_ENT 00025182) (SDNH). RR tracks T7N : R9E Sec 35 NW 1/4, 43.04000°N, 89.38934°W, 22 Sep 1959, T.A. Ebert, 2♂ (UCR_ENT 00025170, UCR_ENT 00025171) (SDNH). **Dodge Co.:** Beaver Dam, 43.45778°N, 88.83722°W, 30 Jul 1911, W. E. Snyder, 1♀ (UCR_ENT 00046273) (CAS). **Langlade Co.:** Elcho, Enterprise Lake Rd., 45.43880°N, 89.19370°W, 12 Sep 2015, P. Masonick, 1♂ (UCR_ENT 00123259) (UCR). **Sauk Co.:** Devil's Lake, 43.41735°N, 89.73163°W, 23 Aug 1969, D. K. Faulkner, 2♂ (UCR_ENT 00025173, UCR_ENT 00025174), 2♀ (UCR_ENT 00025183, UCR_ENT 00025184) (SDNH). **Wyoming: Hot Springs Co.:** Wind River Canyon, 15 mi S. Thermopolis, 43.57940°N, 108.21287°W, 26 Aug 1994, R. L. Langston, 1♂ (UCR_ENT 00047889) (CAS).

***Phymata arctostaphylae* Van Duzee, 1914**

Total records reported: 55, Total Adult Male: 23, Total Adult Female: 31

Specimens Examined: **MEXICO: Baja California: El Condor Co.:** Norte 3.3 mi. S. El Condor, 32.42818°N, 116.16159°W, 30 Aug 1981, D.K. Faulkner, 1♀ (UCR_ENT 00025165) (SDNH). **USA: California: Imperial Co.:** San Luis Creek, 37.18361°N, 120.90222°W, 11 Sep 1972, Unknown, 1♂ (UCR_ENT 00065803) (UCR). **Kern Co.:** 24 mi. Mt. Pinos on Hwy 33, 34.81167°N, 119.14639°W, 24 Aug 1973, D. Johnson, 1♀ (UCR_ENT 00065814) (UCR). **Los Angeles Co.:** Angeles National Forest 8 mi. N. Sulphur Springs, 34.59550°N, 118.61333°W, 05 Aug 1981, G. Gordh, 1♀ (UCR_ENT 00065811) (UCR). Los Angeles NF, Islip Saddle on Hwy 2, 34.35700°N, 117.85035°W, 10 Aug 2012, Weirauch, Russell, Frankenberger, Kim, Gordon, 1♂ (UCR_ENT 00127498), 4♀ (UCR_ENT 00071907, UCR_ENT 00127495-UCR_ENT 00127497) (UCR); 10 Aug 2015, P.K. Masonick & S. Truong, 1♂ (UCR_ENT 00123189), 1♀ (UCR_ENT 00123285) (UCR). Santa Susana Mountains, Wickham Canyon, 34.37000°N, 118.60000°W, 21 Oct 1967, J. Lyon, 1♀ (UCR_ENT 00123169) (UCR). **Riverside Co.:** 3.5 mi. SE of Mountain Center, San Jacinto Mountains, 33.66825°N, 116.68183°W, 06 Oct 1979, E. M. Fisher, 3♂ (UCR_ENT 00098961-UCR_ENT 00098963) (CAS). Hwy 74 at Hurkey Creek Park, 33.67508°N, 116.68194°W, 22 Aug 2016, A. J. Mayor, 1♂ (UCR_ENT 00127541) (UCR). **San Bernardino Co.:** Mill Creek, San Bernardino Mountains, 34.08721°N, 117.11396°W, 22 Oct 1950, Timberlake, 1♀ (UCR_ENT 00065809) (UCR). Rock Camp N. of Lake Arrowhead, 34.34498°N, 117.17276°W, 22 Oct 1978, D. Hawks, 2♂ (UCR_ENT 00065805, UCR_ENT 00065806), 2♀ (UCR_ENT 00065807, UCR_ENT 00065808) (UCR). **San Diego Co.:** 5 mi. south Julian, 33.00692°N, 116.57673°W, 12 Oct 1978, D. Pendleton, 1♀ (UCR_ENT 00025120) (SDNH). Crest Canyon N. of Del Mar (32.96285,-117.255167) 22m, 32.96285°N, 117.25516°W, 27 Oct 2006, MA Wall (LMW024), 1♂ (UCR_ENT 00025119), 3♀ (UCR_ENT 00024966-UCR_ENT 00024967, UCR_ENT 00025118) (SDNH). Cuyamaca, 32.98472°N, 116.57000°W, 10 Oct 1940, Unknown, 1♂ (UCR_ENT 00025147) (SDNH); 10 Oct 1940, G. F. Harbison, 2♂ (UCR_ENT 00025149, UCR_ENT 00025150), 1♀ (UCR_ENT 00025148) (SDNH). Julian Dump, 33.07861°N, 116.60111°W, 06 Sep 1979, D. K. F., 1♀ (UCR_ENT 00024964) (SDNH); 06 Sep 1979, Unknown, 2♂ (UCR_ENT 00024965, UCR_ENT 00025058) (SDNH). Julian, Hwy 79 Inspiration Point, 33.05151°N, 116.56523°W, 15 Oct 1977, DKF, 1 Subadult Female (UCR_ENT 00025158), 1♂ (UCR_ENT 00025161), 4♀ (UCR_ENT 00025159-UCR_ENT 00025160, UCR_ENT 00025162, UCR_ENT 00025163) (SDNH). Laguna Mountains, Crouch Meadow, 32.84764°N, 116.47200°W, 18 Sep 1979, D. Hawks, 1♀ (UCR_ENT 00065813) (UCR). Laguna Mts. Julian Dump, 33.07861°N, 116.60111°W, 01 Oct 1978, J.W.B. & D.K.F., 1♂ (UCR_ENT 00025157), 3♀ (UCR_ENT 00025121, UCR_ENT 00025123, UCR_ENT 00025151) (SDNH); 01 Oct 1978, D. K. F., 1♂ (UCR_ENT 00025156), 5♀ (UCR_ENT 00025122, UCR_ENT 00025152-UCR_ENT 00025155) (SDNH). Laguna mt., 32.87222°N, 116.41750°W, 12 Aug 1973, Unknown, 1♂ (UCR_ENT 00065802) (UCR); 12 Aug 1973, A. Strong, 1♂ (UCR_ENT 00065804) (UCR). Laguna, Manzanita, 32.66889°N, 116.28889°W, 04 Sep 1927, C. C. Searl, 1♂ (UCR_ENT 00025057) (SDNH). Pine Valley, 32.83583°N, 116.53361°W, 17 Oct 1927, C. C. Searl, 2♂ (UCR_ENT 00025055, UCR_ENT 00025056) (SDNH).

***Phymata borica* Evans, 1931**

Total records reported: 41, Total Adult Male: 18, Total Adult Female: 23

Specimens Examined: **USA: Arizona: Cochise Co.:** 2 mi E Onion Saddle, Chiricahua Mts., 31.93333°N, 109.22857°W, 01 Jul 1985, W. F. Barr, 1♀ (UCR_ENT 00080183) (WFBM). 5 mi W of Portal, Southwestern Research Station (SWRS), 31.88250°N, 109.20600°W, 14 Aug 1988, R.S. Miller family, 1♀ (UCR_ENT 00124123) (MTEC). 9 miles W. of Onion Saddle, 31.93187°N, 109.41676°W, 10 Sep 1954, Timberlake, 1♀ (UCR_ENT 00123149) (UCR). Cave Creek Canyon, Chiricahua Mountains, Herb Martyr Dam, 31.86667°N, 109.23333°W, 11 Aug 1980, H. A. Hespenheide, 1♂ (UCR_ENT 00127623), 1♀ (UCR_ENT 00123148) (UCR). Cave Creek Canyon, Chiricahua Mtns, East Turkey Creek, 6.5 Mi W Portal, 31.90000°N, 109.25000°W, 29 Jun 2001, H. A. Hespenheide, 1♀ (UCR_ENT 00119015) (UCR); 27 Jun 1984, H. A. Hespenheide, 2♂ (UCR_ENT 00123145, UCR_ENT 00123147), 2♀ (UCR_ENT 00123144, UCR_ENT 00123146) (UCR). Chiricahua Mountains, 31.59222°N, 109.24000°W, 26 Jul 1980, A. Strong, 1♀ (UCR_ENT 00067449) (UCR); 02 Sep 1981, M.A. Ivie and R.S. Miller, 1♀ (UCR_ENT 00124124) (MTEC). Chiricahua Mts. Herb Martyr Lake, 31.87352°N, 109.23475°W, 11 Aug 1980, L. Guidry, 1♀ (UCR_ENT 00078927) (SDNH). Huachuca Mountains, Ramsey Canyon, 31.44916°N,

110.30626°W, 03 Jul 2013, P.H. Sullivan, 1♀ (UCR_ENT 00104836) (UCR). **Mohave Co.:** Hualapai Mountains, D-W Ranch Road, 35.14552°N, 113.91235°W, 25 Sep 1989, D.C. Hawks & G. P. Bruyca, 1♂ (UCR_ENT 00067435) (UCR). **Pima Co.:** 2.9mi S of Pima, 31.95735°N, 110.95056°W, 17 Sep 1953, Timberlake, 1♂ (UCR_ENT 00066277) (UCR). Santa Rita Range Reserve, desert grassland, 31.85472°N, 110.22861°W, 05 Aug 1980, D. K. Faulkner, 1♀ (UCR_ENT 00078926) (SDNH). **Colorado: Montrose Co.:** 10 mi E Naturita, 38.21941°N, 108.38300°W, 8 August 1970, S. L. Ellis & O. Shields, 1♂ (UCR_ENT 00039308), 2♀ (UCR_ENT 00039309, UCR_ENT 00039310) (LACM). **unknown Co.:** Colo 1742, 38.99043°N, 105.48649°W, no date provided, Unknown, 1♂ (UCR_ENT 00079047) (CAS). **Utah: Beaver Co.:** Milford, 39.39691°N, 113.01789°W, 18 Sep 1908, Bradley, 1♂ (UCR_ENT 00079048), 4♀ (UCR_ENT 00079056-UCR_ENT 00079059) (CAS). **Emery Co.:** Huntington, 39.32670°N, 110.96390°W, 07 Sep 1955, N. McFarland, 1♂ (UCR_ENT 00039346) (LACM). **Grand Co.:** 1 mi E of Moab, 38.57333°N, 109.53063°W, 11 Sep 1968, Bartholomew, 1♂ (UCR_ENT 00079049), 2♀ (UCR_ENT 00079054, UCR_ENT 00079055) (CAS). **Iron Co.:** 3 mi E Cedar City, 37.67803°N, 113.00615°W, 11 Feb 1971, Unknown, 2♂ (UCR_ENT 00079896, UCR_ENT 00079897) (WFBM); 21 Aug 1971, D. E. Foster, 2♀ (UCR_ENT 00080184, UCR_ENT 00080185) (WFBM). **Kane Co.:** 18mi E of Kanab, 37.03435°N, 112.21039°W, 23 Sep 1964, Timberlake, 4♂ (UCR_ENT 00066367-UCR_ENT 00066370) (UCR). 8 mi. WNW. Kanab, 37.07161°N, 112.66564°W, 04 Sep 1962, R. L. Macdonald, 1♀ (UCR_ENT 00067558) (UCR). **Washington Co.:** 4mi SW of Shivwits, 37.14383°N, 113.81512°W, 22 Sep 1964, Timberlake, 1♂ (UCR_ENT 00066372) (UCR).

Phymata fasciata (Gray, 1832)

Total records reported: 285, Total Adult Male: 158, Total Adult Female: 124

Specimens Examined: **USA: Alabama: Mobile Co.:** Mobile, 30.69317°N, 88.04310°W, 25 Oct 1939, E. C. Van Dyke, 1♀ (UCR_ENT 00079217) (CAS). **Arizona: Cochise Co.:** 2 mi E of Portal, 31.90800°N, 109.11000°W, 08 Aug 1969, D. E. Foster, L. S. Hawkins, R. L. Penrose, 1♂ (UCR_ENT 00080047) (WFBM). 2 mi NE of Portal, 31.93405°N, 109.11673°W, 02 Jul 1964, Unknown, 2♂ (UCR_ENT 00079931, UCR_ENT 00079932) (WFBM). 3.5 mi. S Apache, 31.63948°N, 109.13167°W, 02 Aug 1967, L. D. Anderson, 1♀ (UCR_ENT 00065970) (UCR). 4 mi S Wilcox, 32.19219°N, 109.83175°W, 25 Jul 1969, D. E. Foster, 5♂ (UCR_ENT 00080039-UCR_ENT 00080043), 4♀ (UCR_ENT 00080057-UCR_ENT 00080060) (WFBM). 4 mi. S. Apache, 31.63222°N, 109.13167°W, 01 Aug 1967, F. G. Andrews, 1♂ (UCR_ENT 00061628) (UCR). 42 Forest Road at Paradise Road, 31.90861°N, 109.25139°W, 08 Jun 2015, G. Ballmer, 1♂ (UCR_ENT 00127549) (UCR). 6 mi SW of Rodeo, Hidalgo Co., New Mexico, 31.75862°N, 109.08523°W, 02 Jul 1964, Unknown, 1♂ (UCR_ENT 00080046), 1♀ (UCR_ENT 00080061) (WFBM). 6 mi W Dos Cabezas, 32.17538°N, 109.72594°W, 09 Jun 1970, A. L. Antonelli & D. E. Foster, 11♂ (UCR_ENT 00080028-UCR_ENT 00080038), 9♀ (UCR_ENT 00080048-UCR_ENT 00080056) (WFBM). Carr Canyon, 31.45670°N, 110.23890°W, 12 Jun 1969, T. Halstead, 3♂ (UCR_ENT 00039311-UCR_ENT 00039313) (LACM). Chiricahua National Monument, 32.00010°N, 109.00595°W, 22 August 1951, Lloyd Martin, 1♂ (UCR_ENT 00039314) (LACM). Elfrida, 31.69000°N, 109.69000°W, 09 Sep 1968, Unknown, 2♂ (UCR_ENT 00078792, UCR_ENT 00078793) (SDNH). Huachuca Mountains, 5354 Ash Canyon Road, 0.5 mi W of Hwy 92, 31.38194°N, 110.22444°W, 04 May 1979, N. McFarland, 2♂ (UCR_ENT 00078789, UCR_ENT 00078790) (SDNH). Ramsey Canyon, Huachuca Mountains, 31.46260°N, 110.28952°W, 18 Jul 1942, E. C. Van Dyke, 1♀ (UCR_ENT 00079220) (CAS). Silver Cr., 1.7 mi W Portal, 31.92315°N, 109.12867°W, 22 Aug 1975, S. I. & S. L. Frommer, 1♀ (UCR_ENT 00061740) (UCR). Tex Canyon, Chiricahua Mts., 31.65399°N, 109.30867°W, 23 Sep 1927, J. A. Kusche, 1♀ (UCR_ENT 00079225) (CAS); 07 Oct 1927, J. A. Kusche, 1♀ (UCR_ENT 00079226) (CAS); 08 Oct 1927, J. A. Kusche, 3♀ (UCR_ENT 00079227-UCR_ENT 00079229) (CAS). Tex Canyon, Chiricahua Mts. (45-6000 ft), 31.65389°N, 109.30867°W, 01 Oct 1927, J. A. Kusche, 1♂ (UCR_ENT 00079208) (CAS). Warren, 31.41083°N, 109.87778°W, 20 May 1915, J. I. Carlson, 6♂ (UCR_ENT 00079209-UCR_ENT 00079214), 3♀ (UCR_ENT 00079221-UCR_ENT 00079223) (CAS). Willcox Playa, 32.13952°N, 109.84673°W, no date provided, J. L. Neff, 1♀ (UCR_ENT 00098985) (CAS). **Pima Co.:** Green Valley, 31.80000°N, 111.05000°W, 10/2/1992, Unknown, 1♂ (UCR_ENT 00095899) (LACM). Hwy 62, Box Canyon Road, 31.80668°N, 110.75800°W, 07 Sep 2017, P. Masonick, 1♂ (UCR_ENT 00127548) (UCR). **Santa Cruz Co.:** 9 mi NW. Nogales along Route 289, 31.41311°N, 111.02043°W, 24 Sep 1968, P.S. Bartholomew, 1♂ (UCR_ENT 00098986) (CAS). **Arkansas: Crawford Co.:** Devils Den, near Winslow, 35.77444°N, 94.24167°W, 16 Jun 1974, E. S. Ross, 1♂ (UCR_ENT 00079067), 1♀ (UCR_ENT 00079183) (CAS). **Colorado: Baca Co.:** Regnier, 37.00000°N, 102.83333°W, 06 Jun 1919 - 09 Jun 1919, Unknown, 1♀ (UCR_ENT 00079923) (WFBM). **Fremont Co.:** Phantom Cyn., 38.49528°N, 105.10998°W, 01 Aug 1973, Unknown, 1♂ (UCR_ENT 00065912) (UCR). **Delaware: Sussex Co.:** Nassau, 38.75200°N, 75.18800°W, 05 Jul 1978, Jim Robertson, 1♀ (UCR_ENT 00095904) (LACM). **Florida: Collier Co.:** Unknown, 26.18358°N, 81.40773°W, 1976, J. Longino, 1♀ (UCR_ENT 00095719) (LACM). **Georgia: Clarke Co.:** Athens State Botanical Gardens, 33.89987°N, 83.38865°W, 25 Aug 2011, T.C. McElrath, 2♀ (UCR_ENT 00104814, UCR_ENT 00104815) (UCR). **Fulton Co.:** Atlanta, 33.74888°N, 84.38805°W, 10 Jun 1951, G. Heid, 1♂ (UCR_ENT 00095881) (LACM). **Illinois: Alexander Co.:** Olive Branch, 37.16861°N, 89.35166°W, 05 Sep 1923, O. Bryant, 1♂ (UCR_ENT 00079204) (CAS). **Louisiana: Beauregard Co.:** DeRidder, 30.84631°N, 93.28905°W, 10 May 1967, D. Hicks, 1♀ (UCR_ENT 00095920) (LACM). **Maryland: Baltimore Co.:** Baltimore, 39.29040°N, 76.61220°W, Jul 1909, F. E. Blaisdell, 1♀ (UCR_ENT 00079182) (CAS). **Calvert Co.:** Port Republic, 38.50083°N, 76.52944°W, 18 May 1968, Snelling, 1♂ (UCR_ENT 00095937), 1♀ (UCR_ENT 00095938) (LACM). **Howard Co.:** Schooley Mill Park, 39.16611°N, 76.96083°E, 29 Aug 2015, R. Waterworth & J. Mottern, 12♂ (UCR_ENT 00127440-UCR_ENT 00127446, UCR_ENT 00127453-UCR_ENT 00127455, UCR_ENT 00127550, UCR_ENT 00127551), 7♀ (UCR_ENT 00127456-UCR_ENT 00127458, UCR_ENT 00127552-UCR_ENT 00127555) (UCR). **Montgomery Co.:** Plummers Island, 38.97049°N, 77.17630°W, 25 May 1918, F. E. Blaisdell, 1♂ (UCR_ENT 00079201) (CAS). **Prince George's Co.:** Bowie, 39.00670°N, 76.77940°W, 26 May 1968, Snelling, 1♀ (UCR_ENT 00095929) (LACM); 08 Jun 1969, Snelling, 1♀ (UCR_ENT 00095930) (LACM). **Missouri: Jackson Co.:** Atherton, 39.18611°N, 94.30528°W, 06 Jun 1915, Unknown, 18♂ (UCR_ENT 00079074, UCR_ENT 00079127-UCR_ENT 00079142, UCR_ENT 00079206), 4♀ (UCR_ENT 00079156-UCR_ENT 00079159) (CAS); 13 Jun 1915,

Unknown, 1♂ (UCR_ENT 00079143), 1♀ (UCR_ENT 00079161) (CAS); 19 Jun 1915, Unknown, 1♂ (UCR_ENT 00079144) (CAS); 16 Jun 1915, Unknown, 6♂ (UCR_ENT 00079145-UCR_ENT 00079150), 3♀ (UCR_ENT 00079162-UCR_ENT 00079164) (CAS); 30 Jun 1915, Unknown, 1♂ (UCR_ENT 00079151), 1♀ (UCR_ENT 00079165) (CAS); 31 May 1915, Unknown, 2♂ (UCR_ENT 00079152, UCR_ENT 00079153), 3♀ (UCR_ENT 00079166-UCR_ENT 00079167, UCR_ENT 00079189) (CAS); 12 Jun 1915, Unknown, 1♀ (UCR_ENT 00079160) (CAS). **Johnson Co.:** Knob Noster State Park, 38.73592°N, 93.61620°W, 11 Jul 1946, Unknown, 1 Nymph (UCR_ENT 00096320) (LACM). **New Mexico: Dona Ana Co.:** 2 mi E of Mesilla Park, 32.27584°N, 106.73235°W, 30 Sep 1962, Timberlake, 1♂ (UCR_ENT 00066281) (UCR). **Hidalgo Co.:** 1 mi S of Rodeo, 31.82100°N, 109.03100°W, 26 Jun 1969, D. E. Foster, L. S. Hawkins, R. L. Penrose, 2♂ (UCR_ENT 00080044, UCR_ENT 00080045) (WFBM). **Sandoval Co.:** Jemez Springs, 35.76863°N, 106.69225°W, 17 Jul 1958, W. F. Barr, 1♂ (UCR_ENT 00079573) (WFBM). Jemez Springs, 35.76861°N, 106.69167°W, 27 May 1945, W. O. Griesel, 3♂ (UCR_ENT 00095896-UCR_ENT 00095898), 2♀ (UCR_ENT 00095913, UCR_ENT 00095914) (LACM). **New York: Richmond Co.:** Staten Island, 40.58333°N, 74.15000°W, VIII.16, Unknown, 1♀ (UCR_ENT 00079188) (CAS). **Suffolk Co.:** Cold Spring Harbor, Long Island, 40.87678°N, 73.47043°W, 12 Jul 1919, H. M. Parshley, 2♂ (UCR_ENT 00079064, UCR_ENT 00079065) (CAS); 03 Aug 1920, H. M. Parshley, 1♂ (UCR_ENT 00079066) (CAS). **North Carolina: Brunswick Co.:** Unknown, 34.09119°N, 78.29714°W, 01 Apr 1978, J. T. Longino, 1♂ (UCR_ENT 00086561) (LACM). **Carerret Co.:** Fort Macon State Park, 34.69556°N, 76.68889°W, 27 Aug 2005, R. Newman, 4♂ (UCR_ENT 00110134-UCR_ENT 00110137), 3♀ (UCR_ENT 00110131-UCR_ENT 00110133) (UCR); 16 May 2006, R. Newman, 2♂ (UCR_ENT 00110138, UCR_ENT 00110139) (UCR). **Durham Co.:** Durham, 35.98861°N, 78.90722°W, 11 Jun 1953, O. W. Graft, Jr., 1♂ (UCR_ENT 00079154) (CAS). **Forsyth Co.:** Kernersville, 36.11972°N, 80.07389°W, Aug 1905, R. Woglum, 1♀ (UCR_ENT 00065993) (UCR). **Mecklenburg Co.:** Charlotte, 35.22710°N, 80.84310°W, 25 Apr 1902, F. Sherman Jr., 1♀ (UCR_ENT 00061736) (UCR). **Moore Co.:** Southern Pines, 35.17389°N, 79.39250°W, 12 Jul 1915, A. H. Manee, 1♂ (UCR_ENT 00079068) (CAS); 30 Jun 1915, A. H. Manee, 1♂ (UCR_ENT 00079069) (CAS); 06 May 1910, A. H. Manee, 1 Juvenile sex unknown (UCR_ENT 00079155) (CAS). Southern Pines, 35.17405°N, 79.39225°W, 07 Apr 1915, A. H. Manee, 1♀ (UCR_ENT 00079168) (CAS); 12 Apr 1915, A. H. Manee, 1♀ (UCR_ENT 00079169) (CAS). **Pitt Co.:** Greenville, 35.61277°N, 77.36638°W, 14 Sep 1986, Richard S. Peigler, 1♀ (UCR_ENT 00095933) (LACM). **Swain Co.:** Smokemont, 35.55343°N, 83.30849°W, 17 Jul 1941, A. L. Melander, 1♂ (UCR_ENT 00065994) (UCR). **Wake Co.:** Raleigh, 35.77194°N, 78.63889°W, 16 Jun 1906, R. Woglum, 1♂ (UCR_ENT 00061729) (UCR); 06 Oct 1900, F. Sherman Jr., 1♀ (UCR_ENT 00061730) (UCR); 01 Jun 1906, R. S. Woglun, 3♀ (UCR_ENT 00061731-UCR_ENT 00061733) (UCR). **Ohio: Butler Co.:** Oxford, 39.51626°N, 84.72564°W, 02 Aug 1967, Unknown, 1♀ (UCR_ENT 00061741) (UCR); 16 Jun 1967, Unknown, 1♂ (UCR_ENT 00065995) (UCR). **Columbiana Co.:** 7 mi S Rogers, 40.68799°N, 80.62828°W, 20 Jun 1967, R. L. Westcott and J. A. Westcott, 1♂ (UCR_ENT 00079908) (WFBM). **Fairfield Co.:** Fairfield Co, 39.83333°N, 82.60000°W, 29 Aug 1943, H. W. Smith, 7♂ (UCR_ENT 00079907, UCR_ENT 00079911-UCR_ENT 00079916) (WFBM). **Hocking Co.:** 8 mi. SE Lancaster, 39.61642°N, 82.50183°W, 05 Aug 1961, Unknown, 1 Juvenile sex unknown (UCR_ENT 00095936), 2♀ (UCR_ENT 00095931, UCR_ENT 00095932) (LACM). **Pennsylvania: Allegheny Co.:** 79 & Coraopolis Rd., 40.50444°N, 80.13556°W, 27 Sep 2013, G. Kenney, 1♀ (UCR_ENT 00104821) (UCR). Pittsburgh, 40.44056°N, 79.99611°W, no date provided, Unknown, 1♀ (UCR_ENT 00079179) (CAS). **Berks Co.:** Reading, 40.35292°N, 75.93060°W, 16 Sep 1933, Otto Huellman collection, 1♂ (UCR_ENT 00079909) (WFBM). **Delaware Co.:** Bryn Mawr, 40.02472°N, 75.31888°W, Jul 1953, E. S. Ross, 1♀ (UCR_ENT 00079181) (CAS). **Northampton Co.:** Easton, 40.68833°N, 75.22111°W, 15 Sep 1956, J. W. Green, 1♀ (UCR_ENT 00079180) (CAS). Wind Gap, 40.84806°N, 75.29194°W, 09 Jul 1954, J. W. Green, 1♂ (UCR_ENT 00079207) (CAS). **South Carolina: Greenville Co.:** Greenville, 34.85250°N, 82.39417°W, 10 Jun 1985, Richard S. Peigler, 1♂ (UCR_ENT 00095888) (LACM); 24 Sep 1986, Richard S. Peigler, 1♂ (UCR_ENT 00095889) (LACM); 26 Jun 1985, Richard S. Peigler, 1♀ (UCR_ENT 00095935) (LACM). **Tennessee: Morgan Co.:** Deer Lodge, 36.20139°N, 84.75917°W, 1916, Unknown, 1♀ (UCR_ENT 00095718) (LACM). **Warren Co.:** McMinnville, TSU Nursery Research Center, 35.70715°N, 85.74441°W, 22 Jul 2004, Nadeer N. Youssef, 1♀ (UCR_ENT 00079924) (WFBM). **Texas: Bastrop Co.:** Bastrop, 30.11028°N, 97.31500°W, 15 Oct 1978, J. T. Longino, 1♂ (UCR_ENT 00095890) (LACM). **Brewster Co.:** Chisos Mountains, 29.27780°N, 103.30340°W, 15 Jul 1921, C. D. Duncan, 1♂ (UCR_ENT 00079196) (CAS). Chisos Mountains, Big Bend National Park, 29.27780°N, 103.30340°W, 04 Jul 1942, E. C. Van Dyke, 1♂ (UCR_ENT 00079195) (CAS). **Cameron Co.:** Brownsville, 25.90139°N, 97.49722°W, 23 Jun 1930 - 25 Jun 1930, G. Linsley, 1♂ (UCR_ENT 00079190) (CAS); 25 Jun 1930, J. O. Martin, 2♂ (UCR_ENT 00079191, UCR_ENT 00079199), 1♀ (UCR_ENT 00079215) (CAS). Harlingen, 26.19028°N, 97.69583°W, 24 Feb 1979, Joe E. Eger, Richard S. Peigler, 1♂ (UCR_ENT 00095900) (LACM). Resaca De La Palma State Park, 25.99178°N, 97.56224°W, 25 Jun 2015, P.K. Masonick & A.J. Baker, 4♂ (UCR_ENT 00127602-UCR_ENT 00127605), 2♀ (UCR_ENT 00127606, UCR_ENT 00127607) (UCR). Sabal Palm Grove Sanctuary, 25.85016°N, 97.42440°W, 24 Mar 1986, W. F. Barr, 1♂ (UCR_ENT 00079921) (WFBM); 03 Jun 1984, Marlin Rice, 1♀ (UCR_ENT 00079925) (WFBM). **Cass Co.:** Naples, 33.20306°N, 94.67889°W, 12 Jun 1960, W. F. Barr, 1♀ (UCR_ENT 00079922) (WFBM). **Culberson Co.:** Near Pine Springs, 31.89262°N, 104.81550°W, 10 Jul 1961, R. L. Westcott, 2♂ (UCR_ENT 00095893, UCR_ENT 00095894), 1♀ (UCR_ENT 00095912) (LACM). **Dallas Co.:** Dallas, 32.76667°N, 96.78333°W, no date provided, Boll, 1♀ (UCR_ENT 00079216) (CAS). **Dimmit Co.:** Chaparral Wif. M. A., 28.32597°N, 99.40755°W, 20 Oct 1979 - 25 Oct 1979, J. Longino, 1♂ (UCR_ENT 00095901), 1♀ (UCR_ENT 00095910) (LACM). **El Paso Co.:** El Paso, 31.75861°N, 106.48639°W, 04 Apr 1902, Unknown, 3♂ (UCR_ENT 00079198, UCR_ENT 00079202, UCR_ENT 00079203) (CAS); 29 Jun 1921, C. D. Duncan, 1♀ (UCR_ENT 00079218) (CAS); 14 Jul 1942, E. C. Van Dyke, 1♀ (UCR_ENT 00079219) (CAS). Hwy 10 E of El Paso, 31.52048°N, 106.13300°W, 31 Aug 2009, C. Weirauch, J. Heraty, 1♀ (UCR_ENT 00071906) (UCR). **Harris Co.:** 3 Miles SW Westfield, 29.98464°N, 95.43387°W, 27 Jun 1961 - 28 Jun 1961, R. L. Westcott, 1♂ (UCR_ENT 00095892) (LACM). **Hays Co.:** Near Henly, 30.19465°N, 98.21084°W, 06 May 1980, Richard S. Peigler, 1♀ (UCR_ENT 00095906) (LACM). **Hidalgo Co.:** Mission, 26.21556°N, 98.32500°W, 01 Nov 2013, R.A. Behrstock, 3♂ (UCR_ENT 00104822-UCR_ENT 00104824), 2♀ (UCR_ENT 00104825, UCR_ENT 00104826) (UCR). **Jeff Davis Co.:** 19 mi W Fort Davis, 30.59175°N, 104.21861°W, 18 Jun 1968, S. M. Hogue, 1♂ (UCR_ENT 00079920)

(WFBM). Hwy. 166 5-1 mi. N/ Half -way point & Ho Hill, 30.68596°N, 104.24300°W, 21 Sep 1984, A. Strong, 1♀ (UCR_ENT 00061743) (UCR). Limpia Canyon Davis Mts., 30.45010°N, 104.05020°W, 06 Jul 1961 - 08 Jul 1961, R. L. Westcott, 1♂ (UCR_ENT 00095902), 2♀ (UCR_ENT 00095925, UCR_ENT 00095926) (LACM); 17 Jun 1961 - 20 Jun 1961, R. L. Westcott, 2♀ (UCR_ENT 00095927, UCR_ENT 00095928) (LACM). near Fort Davis, 30.59990°N, 103.92620°W, 26 Jun 2014, A.J. Baker and S.A. Heacox, 2♀ (UCR_ENT 00104895, UCR_ENT 00104916) (UCR). **Live Oak Co.:** 2 mi N Dinero, 28.25544°N, 97.96153°W, 22 Mar 1986, W. F. Barr, 1♂ (UCR_ENT 00079919) (WFBM). **McMullen Co.:** Choke Canyon State Park: Calliham Unit, 28.48235°N, 98.35302°W, 23 Jun 2015, P.K. Masonick & A.J. Baker, 1♂ (UCR_ENT 00121786) (UCR). **Pecos Co.:** Sheffield, 30.69040°N, 101.82260°W, 26 Jul 1921, C. D. Duncan, 1♀ (UCR_ENT 00079224) (CAS). **Randall Co.:** Palo Duro Canyon State Park, 34.98553°N, 101.70352°W, 08 May 1961, Llyod, Reis, Rees, Ford, 1♂ (UCR_ENT 00095895) (LACM). **Travis Co.:** Austin, 30.26694°N, 97.74278°W, 07 Jun 1929, J. O. Martin, 1♂ (UCR_ENT 00079197) (CAS); 05 May 1901, Unknown, 1♂ (UCR_ENT 00079200) (CAS). **Wharton Co.:** 2 mi SW Wharton, 29.29086°N, 96.12605°W, 29 Mar 1983, Marlin Rice, 1♂ (UCR_ENT 00079910) (WFBM). **Virginia: Fairfax Co.:** Ashgrove, 38.84524°N, 77.29873°W, Aug 1900, F. Sherman Jr., 1♀ (UCR_ENT 00061734) (UCR). Difficult Run, 38.92041°N, 77.31221°W, 16 May 1931, Timberlake, 1♀ (UCR_ENT 00066291) (UCR). Great Falls, 38.99861°N, 77.25472°W, 23 Sep 1956, P. H. Arnaud Jr., 2♂ (UCR_ENT 00079062, UCR_ENT 00079063) (CAS). **Norfolk Co.:** Norfolk, 36.90188°N, 76.25850°W, 22 Sep 1932, L. D. Anderson, 2♀ (UCR_ENT 00065822, UCR_ENT 00065823) (UCR). **Rockbridge Co.:** Naturl Bridge, 37.63279°N, 79.53547°W, 18 Jun 1941, A. L. Melander, 2♀ (UCR_ENT 00061737, UCR_ENT 00061738) (UCR). **Warren Co.:** 3 mi. N. of Nineveh, 39.05932°N, 78.16528°W, 13 Jul 1980, T. A. Greager, 1♀ (UCR_ENT 00061742) (UCR). **West Virginia: Jackson Co.:** Evans Lake, 38.82036°N, 81.77958°W, 07 Aug 2014, L.T. Miller, 1♀ (UCR_ENT 00127447) (UCR). Rollins Lake WMA, near Evans, 38.82417°N, 81.76305°W, 11 Sep 2013, L.T. Miller, 2♂ (UCR_ENT 00104886, UCR_ENT 00104887), 5♀ (UCR_ENT 00104885, UCR_ENT 00104888-UCR_ENT 00104891) (UCR). **Kanawha Co.:** Kanawha State Forest, 38.25611°N, 81.65417°W, 13 Sep 2014, L.T. Miller, 1♀ (UCR_ENT 00127461) (UCR). nr Mink Shoals, 38.38954°N, 81.58485°W, 08 Sep 2014, L.T. Miller, 1♀ (UCR_ENT 00127459) (UCR). **Lincoln Co.:** Upper Mud River WMA, 38.09435°N, 81.97617°W, 25 Sep 2014, L.T. Miller, 1♀ (UCR_ENT 00127448) (UCR). **Monongalia Co.:** Morgantown, 39.62944°N, 79.95611°W, 07 Sep 2014, L.T. Miller, 1♀ (UCR_ENT 00127462) (UCR). **Putnam Co.:** Confidence, 38.57259°N, 81.82874°W, 10 Sep 2014, L.T. Miller, 1♂ (UCR_ENT 00127460) (UCR). **Wayne Co.:** East Lynn Lake, 38.10091°N, 82.34618°W, 03 Sep 2014, L.T. Miller, 1♂ (UCR_ENT 00115629), 2♀ (UCR_ENT 00127449, UCR_ENT 00127633) (UCR).

***Phymata granulosa* Handlirsch, 1897**

Total records reported: 43, Total Adult Male: 27, Total Adult Female: 16

Specimens Examined: **MEXICO: Chiapas: Comit fn de Dom nguez Municipality Co.:** Ciudad Cuauhtemoc, 15.66479°N, 92.00581°W, 27 Sep 1987, F. Arias, 1♂ (UCR_ENT 00034332) (UCR). **None or Unknown Co.:** Reserva El Ocote, 16.99502°N, 93.64056°W, 02 Dec 1993 - 10 Dec 1993, G. Ortega, E. Barrera, A. Casasola, 1♀ (UCR_ENT 00034315) (UCR). **unknown Co.:** km 89. Villa Hermosa - Escarcega, 17.69912°N, 92.24983°W, 25 Jun 1989, A. Cadena and L. Cervantes, 1♀ (UCR_ENT 00036027) (UCR). **Guerrero: None or Unknown Co.:** Atoyac - Nueve Delhi, El Ranchito, 17.41563°N, 100.19399°W, 20 Apr 1988, A. Cadena, M. Garcia, L. Cervantes, 1♀ (UCR_ENT 00034316) (UCR). Teucizapan between Iguala y Teloloapan, 18.45507°N, 99.71439°W, 15 Jul 1991, H. Brailovsky and J. Bueno, 1♂ (UCR_ENT 00034336) (UCR). km 252 carr. Chilpancingo - Distrito Federal, 17.55060°N, 99.50578°W, 30 Aug 1993, H. Brailovsky and E. Barrera, 1♀ (UCR_ENT 00036030) (UCR). **Hidalgo: None or Unknown Co.:** Xocotitla Mpio Huejutla, 21.11836°N, 98.49111°W, 28 Aug 1999, E. Barrera, 1♂ (UCR_ENT 00034343) (UCR). **Jalisco:** Volcan de Tequila, 20.78844°N, 103.84132°W, 30 Sep 2010, G. Nogueiras, 3♂ (UCR_ENT 00034318-UCR_ENT 00034320) (UCR); 14 Oct 2011, G. Nogueiras, 1♀ (UCR_ENT 00036028) (UCR). **Michoacan: None or Unknown Co.:** Quer ndaro, 19.80834°N, 100.88946°W, 25 May 1988, A. Cadena and L. Cervantes, 1♂ (UCR_ENT 00034341) (UCR). **Morelos: Cuernavaca Co.:** Cuernavaca, 18.91777°N, 99.22666°W, 20 Feb 1984, C.P. Wirth, 1♀ (UCR_ENT 00034313) (UCR); 11 Jul 1989, H. Brailovsky, 1♂ (UCR_ENT 00034322) (UCR). **None or Unknown Co.:** Amatlan, 18.97054°N, 99.05020°W, 01 Feb 2016, H. Brailovsky and A. Reyes, 1♀ (UCR_ENT 00034307) (UCR). Cuautla, 18.80459°N, 98.94555°W, 20 Apr 2013, H. Brailovsky, 1♂ (UCR_ENT 00034334) (UCR). Oaxtepec, 18.90706°N, 98.97027°W, 19 Sep 1984, H. Brailovsky, 1♂ (UCR_ENT 00034330) (UCR). Zona Arqueologica Chalcatzingo, 18.67550°N, 98.77216°W, 14 Aug 2017, P. Masonick & C. Rosas, 2♂ (UCR_ENT 00127589, UCR_ENT 00127590) (UCR). **Nayarit: None or Unknown Co.:** 14 km al H de Huajimic, 21.68347°N, 104.31542°W, 27 Oct 1989, A. Cadena, 1♂ (UCR_ENT 00034344) (UCR). km 10.2 carr. Santiago Boca de Camich n, 21.75223°N, 105.30056°W, 24 Oct 1989, A. Cadena, 1♂ (UCR_ENT 00034340) (UCR). **Oaxaca: None or Unknown Co.:** Hierve el Agua Mpio Mitla, 16.86608°N, 96.27636°W, 4-03-2000, E. Barrera & A. Ibarra, 1♀ (UCR_ENT 00036029) (UCR). Las Anonanas cam. a San Miguel Chimalapa, 16.71418°N, 94.74744°W, 24 Nov 1990, E. Barrera & A. Cadena, 1♂ (UCR_ENT 00034321) (UCR). Salina Cruz, 16.18798°N, 95.19952°W, 05 Mar 1972, F.F. de Martin, 1♀ (UCR_ENT 00036026) (UCR). San Gabriel, 16.09506°N, 97.08155°W, 21 Apr 1983, M. Garcia, 1♀ (UCR_ENT 00034311) (UCR). km 13 Huajuapam Tehuacan, 17.89840°N, 97.70431°W, 31 Aug 1990, E. Barrera & A. Cadena, 1♀ (UCR_ENT 00034312) (UCR). km 14 carr. Mitla-Albarradas, 16.91368°N, 96.34006°W, 26 Mar 1990, E. Barrera & A. Cadena, 1♀ (UCR_ENT 00034308) (UCR). **Puebla: None or Unknown Co.:** 5 km to the SE of Atlxco mpio Atlxco Puebla, 18.83603°N, 98.42619°W, 15 Jun 1994, E. Barrera and C. Mayorga, 1♀ (UCR_ENT 00036025) (UCR). Teyuca, 18.75484°N, 98.44992°W, 28 Oct 1994, H. Brailovsky and C. Mayorga, 1♂ (UCR_ENT 00034338) (UCR). km. 50 Plan San Miguel carr. Huajuapam de Leon, Oaxaca, 18.21075°N, 97.59632°W, 14 Aug 1992, C. Mayorga & E. Barrera, 2♂ (UCR_ENT 00034317, UCR_ENT 00034323) (UCR). **Queretaro: None or Unknown Co.:** Puerto Salitre, 20.72207°N, 99.69259°W, 16 Sep 1998, H. Brailovsky and E. Barrera, 1♀ (UCR_ENT 00034306) (UCR). **Veracruz: Ixtaczoquitlan Co.:** Ixtaczoquitlan, 18.85504°N, 97.06088°W, 13 Apr 2000, H. Brailovsky, E. Barrera, 1♂ (UCR_ENT 00034342) (UCR). **None or Unknown Co.:** 5 km S Boca del Rio, 2 km along road to Anton Lizardo,

19.05194°N, 96.01590°W, 02 Jan 1982, Unknown, 1♂ (UCR_ENT 00034333) (UCR). Estacion de Biologia Los Tuxtlas., 18.58430°N, 95.07485°W, 22 Mar 1989 - 25 Mar 1989, A. Cadena and L. Cervantes, 1♀ (UCR_ENT 00034310) (UCR). Jalapa, 19.53333°N, 96.91667°W, 02 Sep 1984, J. Pena, 6♂ (UCR_ENT 00034324-UCR_ENT 00034329) (UCR); 04 Aug 1985, J. Pena, 1♂ (UCR_ENT 00034335) (UCR). Teocelo, 19.38560°N, 96.97371°W, 02 May 2003, W. Shon, F. Brailovsky, 1♀ (UCR_ENT 00034314) (UCR).

***Phymata luteomarginata* Kormilev, 1957**

Total records reported: 38, Total Adult Male: 25, Total Adult Female: 13

Specimens Examined: **USA: California: Kern Co.:** 1.0-8.1 mi. SW Bodfish, on Kern Canyon Road, 35.53676°N, 118.55417°W, 28 May 2006, J. & A. Rifkind & P. Gum, 1♂ (UCR_ENT 00080085) (WFBM). **San Bernardino Co.:** Mountain Pass, Hwy I-5 at Bailey Road, 35.46810°N, 115.52874°W, 23 Jun 2015, G. Ballmer, 1♂ (UCR_ENT 00127594), 3♀ (UCR_ENT 00127591-UCR_ENT 00127593) (UCR). **Idaho: Bannock Co.:** Lava Hot Springs, 42.61944°N, 112.01416°W, 15 Aug 1966, L.S. Hawkins, Jr., 1♂ (UCR_ENT 00079898) (WFBM). **Nevada: Clark Co.:** Lee Canyon, 36.30889°N, 115.67277°W, 7/1/1966, R. L. Westcott, 2♂ (UCR_ENT 00080147, UCR_ENT 00080148) (WFBM); 7/1/1966, Unknown, 1♀ (UCR_ENT 00080155) (WFBM). Lower Lee Canyon, 36.35131°N, 115.64064°W, 6/27/1966, W. F. Barr, 12♂ (UCR_ENT 00080134-UCR_ENT 00080144, UCR_ENT 00080211), 5♀ (UCR_ENT 00080149-UCR_ENT 00080152, UCR_ENT 00080210) (WFBM); 6/29/1966, D. S. Horning Jr., 2♂ (UCR_ENT 00080145, UCR_ENT 00080146), 2♀ (UCR_ENT 00080153, UCR_ENT 00080154) (WFBM). **Eureka Co.:** Eureka, 39.51270°N, 115.96061°W, 27 Sep 1938, I. McCracken, 1♂ (UCR_ENT 00079051), 1♀ (UCR_ENT 00079053) (CAS). **Lincoln Co.:** Pioche, 37.92972°N, 114.45139°W, 24 Sep 1938, I. McCracken, 1♂ (UCR_ENT 00079050) (CAS). Pioche, 37.92969°N, 114.45221°W, 24 Sep 1938, I. McCracken, 1♀ (UCR_ENT 00079060) (CAS), 1♂ (UCR_ENT 00079895) (WFBM). **Pershing Co.:** Rye Patch SRA, 40.46600°N, 118.30800°W, 30 Jul 2015, A. Baker and J. Witter, 1♂ (UCR_ENT 00127628) (UCR). **Washoe Co.:** 5 mi NW of Nixon, 39.89754°N, 119.39850°W, 14 Jul 1957, Unknown, 1♂ (UCR_ENT 00046198) (CAS). Verdi, 39.51833°N, 119.98778°W, Aug 1956, Tom Emmel, 1♂ (UCR_ENT 00095784) (LACM).

***Phymata metcalfi* Evans, 1931**

Total records reported: 684, Total Adult Male: 396, Total Adult Female: 281

Specimens Examined: **CANADA: British Columbia: Okanagan Co.:** Osoyoos, 49.03333°N, 119.46666°W, 09 Aug 1969, L. Russell, 1♂ (UCR_ENT 00025172) (SDNH). **USA: California: Amador Co.:** Silver Lake, 38.66430°N, 120.12510°W, 02 Nov 1959, P. H. Arnaud, 1♂ (UCR_ENT 00047888) (CAS). **Calaveras Co.:** 3 mi SE West Point, 38.36841°N, 120.48714°W, 20 Sep 1980, M. A. Tenorio, 1♀ (UCR_ENT 00079337) (CAS). **Contra Costa Co.:** Antioch, 38.00500°N, 121.80472°W, 9-10-33, Unknown, 1♀ (UCR_ENT 00095866) (LACM). **Fresno Co.:** King's Canyon National Park: Zumwalt Meadows, 36.79091°N, 118.59840°W, 21 Aug 2014, Erin Wilson, 1♀ (UCR_ENT 00104984) (UCR). Pine Ridge, 37.06111°N, 119.36660°W, 29 Aug 1979, Suzanne Muzzio, 7♂ (UCR_ENT 00079269-UCR_ENT 00079275), 2♀ (UCR_ENT 00079324, UCR_ENT 00079325) (CAS). **Inyo Co.:** 10 mi S of Bishop, dunes, 37.21861°N, 118.39417°W, 20 Jul 1967, M. E. Irwin, 1♀ (UCR_ENT 00067450) (UCR). 15 mi SE Bishop, 37.20965°N, 118.20066°W, 24 Sep 1977, D. Pendleton, 1♂ (UCR_ENT 00078805) (SDNH). 30 mi N of Saline Valley Lake, 36.67713°N, 117.76816°W, 04 May 1974, J. D. Pinto, 2♀ (UCR_ENT 00061641, UCR_ENT 00066855) (UCR). 5 mi NE Jackass Springs, 36.59258°N, 117.45513°W, 30 Aug 1958, Menke & Stange, 1♂ (UCR_ENT 00096289) (LACM). 7 mi E of Big Pine, 37.23171°N, 118.22410°W, 02 Jun 1987, W. F. Barr, 2♂ (UCR_ENT 00080082, UCR_ENT 00080083), 1♀ (UCR_ENT 00080209) (WFBM). 7 mi W of Westgard Pass, 37.30020°N, 118.29066°W, 26 Jun 1958, H. Washburn, 1♂ (UCR_ENT 00096335), 2♀ (UCR_ENT 00096333, UCR_ENT 00096334) (LACM). 8 mi NW of Bishop, 37.44559°N, 118.49737°W, 17 Jun 1972, G. R. Ballmer, 1♂ (UCR_ENT 00065826) (UCR). Gray's Mdw Cmpgd, Independence Crk, 36.78160°N, 118.28926°W, 12 Jul 1966, C. L. Hogue, 2♀ (UCR_ENT 00096010, UCR_ENT 00096011) (LACM). Grays Meadow, 36.46520°N, 118.17140°W, 21 Aug 1973, Unknown, 2♂ (UCR_ENT 00061622, UCR_ENT 00066858) (UCR); 08 Sep 2016, Unknown, 1♂ (UCR_ENT 00127536), 1♀ (UCR_ENT 00127535) (UCR). Independence, 36.80278°N, 118.19917°W, 26 Oct 1963, J. D. Birchim, 5♂ (UCR_ENT 00048259-UCR_ENT 00048263), 1♀ (UCR_ENT 00047908) (CAS); 20 Aug 1963, J. D. Birchim, 1♂ (UCR_ENT 00048258) (CAS). Independence Creek, 36.78361°N, 118.23845°W, 07 Jun 1939, R.M. Bohart, 1♀ (UCR_ENT 00096338) (LACM). Inyo NF: Whitney Portal Rd Switchback, 36.59592°N, 118.21308°W, 13 Aug 2016, P. Masonick & C. Dodge, 1♀ (UCR_ENT 00127540) (UCR). Lone Pine Campground access road, Inyo National Forest, 36.59654°N, 118.17952°W, 21 Sep 2014, P. Masonick, 2♂ (UCR_ENT 00110110, UCR_ENT 00110111), 1♀ (UCR_ENT 00123268) (UCR). Lone Pine Creek, 36.59577°N, 118.13275°W, 06 Jun 1939, R. M. Bohart, 1♀ (UCR_ENT 00096339) (LACM). Pulloff E of Whitney Portal, Inyo National Forest, 36.59087°N, 118.22547°W, 21 Sep 2014, P. Masonick, 4♂ (UCR_ENT 00110116-UCR_ENT 00110119), 1♀ (UCR_ENT 00110120) (UCR). Rock Creek, Bishop, 37.46051°N, 118.73037°W, 13 Aug 1961, L. D. Anderson, 4♂ (UCR_ENT 00067414-UCR_ENT 00067417) (UCR). Whitney Portal, 36.58888°N, 118.22583°W, 13 Aug 2016, P. Masonick, 1♂ (UCR_ENT 00127537), 2♀ (UCR_ENT 00127538, UCR_ENT 00127539) (UCR). Whitney Portal Road & Hogback Road junction, Inyo National Forest, 36.59591°N, 118.20666°W, 21 Sep 2014, P. Masonick, 4♂ (UCR_ENT 00110112-UCR_ENT 00110115) (UCR). **Kern Co.:** Frazier Park, 34.82277°N, 118.94472°W, 28 Oct 1970, Unknown, 1♂ (UCR_ENT 00067436) (UCR); 11/1/70, Unknown, 1♀ (UCR_ENT 00067454) (UCR). Piute Mountain Road T28 1/2S R33E, 35.39587°N, 119.82330°W, 05 Sep 1971, J. P. Donahue, 1♀ (UCR_ENT 00096013) (LACM). Red Rock Canyon, 35.32500°N, 117.94972°W, 16 Oct 1980, J. C. Hall, 4♂ (UCR_ENT 00066788-UCR_ENT 00066791), 1♀ (UCR_ENT 00067451) (UCR). Tehachapi Mountains, Antelope Canyon, 34.85694°N, 118.63028°W, 12 Sep 1975, J. D. Pinto, 4♂ (UCR_ENT 00066762-UCR_ENT 00066765), 4♀ (UCR_ENT 00061645, UCR_ENT 00067441-UCR_ENT 00067443) (UCR); 12 Sep 1975, A. J. Mayor, 9♂ (UCR_ENT 00066766, UCR_ENT 00067418-UCR_ENT 00067419, UCR_ENT 00067421-UCR_ENT 00067426), 1♀ (UCR_ENT 00067420) (UCR); 12 Sep 1975, J. Hlavac, 4♂ (UCR_ENT 00066767-

UCR_ENT 00066770) (UCR). **Lassen Co.:** Eagle Lake (NE shore), Hwy 139, ca. 3 mi. S. Jct. A1,, 40.64500°N, 120.74278°W, 24 Jul 1992, J. D. Pinto, 1♂ (UCR_ENT 00061643) (UCR). NE end Eagle Lake, 40.71250°N, 120.72333°W, 27 Aug 1963, H. B. Leech, 2♂ (UCR_ENT 00047854, UCR_ENT 00047855), 5♀ (UCR_ENT 00047924-UCR_ENT 00047926, UCR_ENT 00047932, UCR_ENT 00047933) (CAS). **Los Angeles Co.:** 2 mi S. Pearblossom, 34.47738°N, 117.90889°W, 19 Sep 1964, R. R. Snelling, 1♂ (UCR_ENT 00039315) (LACM). 2mi W of Vincent, 34.09725°N, 117.99471°W, 14 Oct 1952, Timberlake, 1♂ (UCR_ENT 00066371), 1♀ (UCR_ENT 00067455) (UCR). Big Rock Creek, 34.47512°N, 117.85561°W, 21 Jul 1931, Timberlake, 1♂ (UCR_ENT 00066362) (UCR); 21 Jul 1936, Timberlake, 1♀ (UCR_ENT 00066749) (UCR). Bouquet Canyon, 34.42583°N, 118.54147°W, 05 Sep 1938, J. A. Comstock, 2♂ (UCR_ENT 00096036, UCR_ENT 00096037), 2♀ (UCR_ENT 00095864, UCR_ENT 00095865) (LACM). Frazier Park, 34.82278°N, 118.94389°W, 01 Nov 1970, Unknown, 1♂ (UCR_ENT 00065914) (UCR). Hidden Lake Pine Canyon, 34.70876°N, 118.54711°W, 11 Sep 1953, A. Menke, Jr., 7♂ (UCR_ENT 00095977-UCR_ENT 00095980, UCR_ENT 00095982-UCR_ENT 00095984) (LACM); 11 Sep 1953, Menke & Stange, 1♂ (UCR_ENT 00095985), 4♀ (UCR_ENT 00096002-UCR_ENT 00096005) (LACM); 13 Sep 1953, A. Menke, Jr., 1♀ (UCR_ENT 00096007) (LACM). Little Rock, 34.31160°N, 117.59010°W, 15 Sep 1957, R.X. Schick, 1♂ (UCR_ENT 00095986), 2♀ (UCR_ENT 00095999, UCR_ENT 00096000) (LACM). Littlerock: E. Ave X-12, 34.47395°N, 117.92365°W, 24 Aug 2014, S. Frankenber, 1♀ (UCR_ENT 00105004) (UCR). Mint Canyon, 34.41528°N, 118.45278°W, 01 Sep 1950, Unknown, 1♀ (UCR_ENT 00095996) (LACM). Ridge road in Liebre Mountains, 34.71667°N, 118.66306°W, 05 Oct 1975, P. H. Sullivan, 1♀ (UCR_ENT 00095863) (LACM). San Francisquito Canyon, 34.25000°N, 118.34000°W, 11 Sep 1953, Unknown, 1♀ (UCR_ENT 00095993) (LACM). San Gabriel Mountains Vic. Tie Canyon, 34.39944°N, 118.07528°W, 24 Oct 1977, R. H. Crandall, 1♂ (UCR_ENT 00039316) (LACM). South Fork Campground, 34.39444°N, 117.81944°W, 06 Sep 1971, J. A. Honey, 1♂ (UCR_ENT 00096034), 1♀ (UCR_ENT 00096022) (LACM). Valyermo, 34.44611°N, 117.85139°W, 15 Sep 1957, R.X. Schick, 1♀ (UCR_ENT 00095994) (LACM). Vincent, 34.50055°N, 118.11646°W, 14 Oct 1952, Timberlake, 11♂ (UCR_ENT 00066311-UCR_ENT 00066321), 4♀ (UCR_ENT 00066322-UCR_ENT 00066325) (UCR). W. Ave X-12 Littlerock, 34.47475°N, 117.92420°W, 25 Aug 2012, S. Frankenber, 5♂ (UCR_ENT 00087085, UCR_ENT 00117658-UCR_ENT 00117661) (UCR). **Madera Co.:** 4.5 mi. W. of Tyler, 37.05664°N, 120.39538°W, 29 Sep 1956, Timberlake, 6♂ (UCR_ENT 00066261-UCR_ENT 00066266), 3♀ (UCR_ENT 00066267-UCR_ENT 00066269) (UCR). **Mendocino Co.:** Rice Ck., e. of Bear Ck. camp, 39.29554°N, 123.40176°W, 12 Aug 1953, P. S. Bartholomew, 2♂ (UCR_ENT 00079267, UCR_ENT 00079268) (CAS). **Modoc Co.:** Lake City, Warner Mountains, 41.64269°N, 120.21691°W, 27 Jul 1922 - 01 Aug 1922, C. L. Fox, 10♂ (UCR_ENT 00047814-UCR_ENT 00047823), 9♀ (UCR_ENT 00047839-UCR_ENT 00047847) (CAS). Nr. Canby, 41.44378°N, 120.87024°W, 01 Aug 1938, E. C. Van Dyke, 1♀ (UCR_ENT 00079046) (CAS). Surprise Valley, small mesa 8 mi. ENE of Cedarville, 41.52500°N, 120.03000°W, 09 Sep 1995, Jere Schweikert, 3♂ (UCR_ENT 00047890, UCR_ENT 00079026, UCR_ENT 00079027), 2♀ (UCR_ENT 00047790, UCR_ENT 00047899) (CAS). Upper Alkali Lake, Warner Mountains, 41.25222°N, 120.60389°W, 02 Aug 1922, C. L. Fox, 2♂ (UCR_ENT 00047832, UCR_ENT 00079028), 8♀ (UCR_ENT 00047848-UCR_ENT 00047853, UCR_ENT 00079031, UCR_ENT 00079032) (CAS). **Mono Co.:** 1.5 mi N of Tom's Place, 37.58295°N, 118.68169°W, 16 Aug 1979, C. L. Bellamy, 1♀ (UCR_ENT 00095861) (LACM). Benton, 37.81917°N, 118.47556°W, 01 Aug 1942, W.M. Pearce, 1♀ (UCR_ENT 00079042) (CAS). Hot Creek, 37.66083°N, 118.82777°W, 01 Aug 1936, Unknown, 1♂ (UCR_ENT 00047833), 1♀ (UCR_ENT 00047789) (CAS). Jct. of Hwy 395 & Monitor Pass Rd, 38.64266°N, 119.52763°W, 19 Sep 1980, 12:00 hrs., Stanley C. Williams, 6♂ (UCR_ENT 00047935-UCR_ENT 00047939, UCR_ENT 00079010) (CAS). Mammoth, 37.64800°N, 118.98300°W, 10 Aug 1915 - 15 Aug 1915, R. Mead., 3♂ (UCR_ENT 00079071-UCR_ENT 00079073), 4♀ (UCR_ENT 00079184-UCR_ENT 00079187) (CAS). Mammoth Camp, 38.00222°N, 120.13611°W, , W. D. Pierce, 1♀ (UCR_ENT 00095875) (LACM). McGee Creek, 37.56345°N, 118.78452°W, 12 Aug 1961, C. D. MacNeill, 9♂ (UCR_ENT 00079016-UCR_ENT 00079024), 3♀ (UCR_ENT 00079038-UCR_ENT 00079040) (CAS). Rock Creek, 37.56055°N, 118.67694°W, 10 Sep 1956, Menke & Stange, 2♂ (UCR_ENT 00095965, UCR_ENT 00095966) (LACM). Sherwin Summit, 37.51438°N, 118.62790°W, 16 Aug 1971, Unknown, 1♂ (UCR_ENT 00065830) (UCR); 06 Sep 1957, R.X. Schick, 4♂ (UCR_ENT 00096324-UCR_ENT 00096327), 1♀ (UCR_ENT 00096328) (LACM). Topaz Lake, 38.65444°N, 119.53694°W, 15 Aug 1949, P. C. Hutchison, 24♂ (UCR_ENT 00047877-UCR_ENT 00047887, UCR_ENT 00047891, UCR_ENT 00047975-UCR_ENT 00047978, UCR_ENT 00048226, UCR_ENT 00048255-UCR_ENT 00048257, UCR_ENT 00079348-UCR_ENT 00079351), 13♀ (UCR_ENT 00047892-UCR_ENT 00047898, UCR_ENT 00047900-UCR_ENT 00047905) (CAS). Travertine Hot Springs, 2 mi SE Bridgeport, 38.24586°N, 119.20541°W, 11 Aug 1962, H. B. Leech, 2♀ (UCR_ENT 00047917, UCR_ENT 00047918) (CAS). near Topaz, 38.61882°N, 119.51949°W, 15 Jul 1937, J. A. Comstock, 7♂ (UCR_ENT 00096341-UCR_ENT 00096347), 1♀ (UCR_ENT 00096348) (LACM). none provided, 37.92144°N, 118.95315°W, 8-7-39, W. D. Pierce, 1♀ (UCR_ENT 00095862) (LACM). **Riverside Co.:** .7 mi. NW jct Twin Pines Rd. & Hwy. 243, 33.88305°N, 116.85277°W, 10 Jul 2004, Unknown, 1♂ (UCR_ENT 00098119) (UCR). 1-2 mi. S. of Yucca Valley, 34.08515°N, 116.43139°W, 05 Sep 1946, Timberlake, 1♀ (UCR_ENT 00067568) (UCR). Morongo, 33.95283°N, 116.80783°W, 29 Sep 1944, Timberlake, 3♂ (UCR_ENT 00066310, UCR_ENT 00066338, UCR_ENT 00066339) (UCR). Joshua Tree National Park, nr Skull Rock, 33.99360°N, 116.07590°W, 18 Sep 2016, P. Masonick, 1♂ (UCR_ENT 00127511) (UCR). **San Bernardino Co.:** 10 mi. w. Victorville, 34.53598°N, 117.46638°W, 22 Oct 1955, Blodget & McDonald, 1♂ (UCR_ENT 00095961), 1♀ (UCR_ENT 00095992) (LACM). Cajon Summit, Summit Valley, 34.34944°N, 117.44556°W, 26 Jul 1978, J. LaSalle, 1♀ (UCR_ENT 00067446) (UCR). Clark Mountains (W. end), 35.52166°N, 115.65944°W, 07 Jul 1938, Timberlake, 1♀ (UCR_ENT 00066348) (UCR). Doble area, 34.30333°N, 116.82250°W, 24 Jul 1999, D. C. Hawks, 1♂ (UCR_ENT 00070208) (UCR). Hwy 18 S of 274 junction, 34.37967°N, 116.86881°W, 12 Sep 2014, C. Weirauch, P. Masonick, F. Bianchi, 1♂ (UCR_ENT 00113586), 1♀ (UCR_ENT 00113584) (UCR). Hwy 2 (Angeles Crest Hwy) at Desert Front Road, 34.37667°N, 117.60831°W, 26 Aug 2017, P. Masonick, 2♂ (UCR_ENT 00127434, UCR_ENT 00127435), 3♀ (UCR_ENT 00127436-UCR_ENT 00127438) (UCR); 11 Nov 2017, P. Masonick, 1♀ (UCR_ENT 00127534) (UCR). Hwy 274 W of Yucca Valley, 34.18961°N, 116.43472°W, 12 Sep 2014, C. Weirauch, P. Masonick, F. Bianchi, 6♂ (UCR_ENT 00110101-UCR_ENT 00110105, UCR_ENT 00113556), 3♀ (UCR_ENT 00113554-UCR_ENT 00113555, UCR_ENT

00113580) (UCR). Joshua Tree, 34.13473°N, 116.31306°W, 09 May 1946, A. L. Melander, 1♂ (UCR_ENT 00066383) (UCR). Lucerne Valley, 34.44390°N, 116.96780°W, 22 Sep 1962, Brunson P. Bliven, 4♂ (UCR_ENT 00079012-UCR_ENT 00079015), 1♀ (UCR_ENT 00079037) (CAS). Morongo Valley, 34.04694°N, 116.58000°W, 12 Nov 1945, G. P. Mackenzie, 1♂ (UCR_ENT 00061613) (UCR). New York Mountains, 35.19220°N, 115.12380°W, 23 Sep 1940, Unknown, 1♂ (UCR_ENT 00095963), 1♀ (UCR_ENT 00095995) (LACM). New York Mountains, Keystone Canyon, 35.27166°N, 115.27555°W, 11 Jun 1979 - 12 Jun 1979, Brown and Faulkner, 2♂ (UCR_ENT 00078862, UCR_ENT 00078896), 2♀ (UCR_ENT 00078906, UCR_ENT 00078907) (SDNH); 28 Jun 1969, J. Emmel & O. Shields, 4♂ (UCR_ENT 00095940-UCR_ENT 00095943), 1♀ (UCR_ENT 00096330) (LACM). Rock Camp N. of Lake Arrowhead, 34.34498°N, 117.17276°W, 22 Oct 1978, D. Hawks, 2♂ (UCR_ENT 00066793, UCR_ENT 00066794), 1♀ (UCR_ENT 00067453) (UCR). Rock Corral, 34.32333°N, 116.56000°W, 09 Oct 1980, D. C. Hawks, 5♂ (UCR_ENT 00066795-UCR_ENT 00066799), 5♀ (UCR_ENT 00067501-UCR_ENT 00067505) (UCR). San Bernardino County, unspecified locality, 34.10939°N, 117.28422°W, 22 Oct 1978, D. C. Hawks, 2♂ (UCR_ENT 00061638, UCR_ENT 00066808) (UCR); 02 Nov 1979, R. Millman, 1♀ (UCR_ENT 00067506) (UCR). Summit Valley, 34.33806°N, 117.27004°W, 18 Jul 1959, N. McFarland, 1♀ (UCR_ENT 00096067) (LACM). Yucca Valley, 34.11417°N, 116.43139°W, 29 Aug 1934, Timberlake, 1♂ (UCR_ENT 00066352) (UCR); 28 Sep 1944, Timberlake, 2♀ (UCR_ENT 00067566, UCR_ENT 00067567) (UCR). **Santa Clara Co.:** 15 mi. E. Lick, Mt. Hamilton, 37.28691°N, 121.57133°W, 30 Aug 1967, A. & A. Gillogly, 1♀ (UCR_ENT 00066873) (UCR). Stanford University, 37.42722°N, 122.16917°W, May 1927, Unknown, 1♂ (UCR_ENT 00096336), 1♀ (UCR_ENT 00096337) (LACM). **Shasta Co.:** 3 mi E Hatchet Mountain Pass, 40.85169°N, 121.70965°W, no date provided, R. M. Brown, 2♂ (UCR_ENT 00047856, UCR_ENT 00047857) (CAS). Hat Creek, 40.83047°N, 121.50891°W, 25 Aug 1965, Serje Seminoff, 1♂ (UCR_ENT 00080081) (WFBM). Mt. Lassen, 40.48778°N, 121.50389°W, 20 Aug 1971, Unknown, 1♂ (UCR_ENT 00066884), 1♀ (UCR_ENT 00066883) (UCR). Weed, 41.42278°N, 122.38500°W, 26 Sep 1979, D. K. Faulkner, 1♂ (UCR_ENT 00078795) (SDNH). **Siskiyou Co.:** Junction of Shasta and Klamath Rivers, 41.83045°N, 122.59364°W, Aug 1922, Unknown, 31♂ (UCR_ENT 00095803-UCR_ENT 00095814, UCR_ENT 00095816-UCR_ENT 00095833, UCR_ENT 00096048), 27♀ (UCR_ENT 00095834-UCR_ENT 00095860) (LACM). Siskiyou County, 41.58333°N, 122.51667°W, no date provided, Koebele Collection, 1♀ (UCR_ENT 00079041) (CAS). **Trinity Co.:** Hayfork Creek 1.5 mi S of its East Fork, 40.61427°N, 123.45069°W, 08 Aug 1972, H. B. Leech, 8♂ (UCR_ENT 00079293-UCR_ENT 00079300), 2♀ (UCR_ENT 00079327, UCR_ENT 00079328) (CAS). **Tulare Co.:** 9 mi. S. E. Kennedy Mdw., 36.67794°N, 118.71645°W, 19 Aug 1961, R. L. Macdonald, 2♂ (UCR_ENT 00061632, UCR_ENT 00061633) (UCR). Johnsondale, 35.96666°N, 118.53333°W, 02 Oct 1960, E. Ball, 1♂ (UCR_ENT 00079341) (CAS). **Tuolumne Co.:** 2.4 mi E Columbia, 38.03630°N, 120.35712°W, 18 Oct 1965, R. R. Snelling, 13♂ (UCR_ENT 00096272-UCR_ENT 00096284), 3♀ (UCR_ENT 00096285-UCR_ENT 00096287) (LACM). Buck Meadows - Mather Site, 37.82222°N, 120.09722°W, 1970-1971, A. R. Moldenke, 3♂ (UCR_ENT 00098980-UCR_ENT 00098982) (CAS). North Fork Tuolumne River, 2 mi S Long Barn, 38.09813°N, 120.10734°W, 19 Oct 1989, M. R. Lundgren, 1♂ (UCR_ENT 00079011) (CAS). Twain Harte, 38.03972°N, 120.23277°W, 01 Oct 1987, M. R. Lundgren, 1♀ (UCR_ENT 00079319) (CAS). **Unknown Co.:** Kern River, 35.36648°N, 119.07076°W, 11 Jul 1957, David C. Miller, 3♀ (UCR_ENT 00061618-UCR_ENT 00061620) (UCR). **Ventura Co.:** Lockwood Creek, 34.72194°N, 119.02472°W, 08 Sep 2001, E. Iverson, 1♀ (UCR_ENT 00096026) (LACM). **Idaho: Ada Co.:** Boise, 43.61360°N, 116.20250°W, 04 Sep 1958, R. B. Ferguson, 1♀ (UCR_ENT 00079777) (WFBM). Regina, 43.39210°N, 115.99000°W, 15 Jul 1966, A. R. Gittins, 1♂ (UCR_ENT 00079764), 1♀ (UCR_ENT 00079801) (WFBM). **Bingham Co.:** Aberdeen, 42.94417°N, 112.83818°W, 05 Jul 1940, W. E. Schull, 1♂ (UCR_ENT 00079708) (WFBM); 8-10-1940, Unknown, 1♂ (UCR_ENT 00079709) (WFBM). Grandview, 43.05306°N, 112.78750°W, 13 Jul 1954, A. R. Gittins, 1♀ (UCR_ENT 00079800) (WFBM). **Blaine Co.:** 17.3 mi E Carey, 43.30717°N, 113.60036°W, 19 Aug 1983, J. B. Johnson & F. W. Merickel, 1♀ (UCR_ENT 00080191) (WFBM). **Boise Co.:** 1 mi NW Gardena, 43.98719°N, 116.20304°W, 8/21/1983, J. B. Johnson & F. W. Merickel, 1♂ (UCR_ENT 00080172) (WFBM). 3.7 mi NW Gardena, 44.01361°N, 116.24361°W, 28 Jul 1980, F.W. Merickel & S.O. Packham, 1♀ (UCR_ENT 00080189) (WFBM). Lucky Peak Reservoir, 43.53009°N, 116.02697°W, 13 Sep 1961, R. B. Ferguson, 1♀ (UCR_ENT 00079776) (WFBM). **Butte Co.:** 10 mi S Howe, 43.63784°N, 113.00195°W, 19 Aug 1983, J. B. Johnson & F. W. Merickel, 5♂ (UCR_ENT 00079703-UCR_ENT 00079707), 2♀ (UCR_ENT 00079772, UCR_ENT 00079788) (WFBM). Craters of the Moon National Monument, 43.42972°N, 113.53056°W, 21 Aug 1964, D. S. Horning, Jr., 3♂ (UCR_ENT 00079726-UCR_ENT 00079728), 2♀ (UCR_ENT 00079778, UCR_ENT 00079779) (WFBM); 22 Aug 1964, D. S. Horning, Jr., 2♂ (UCR_ENT 00079729, UCR_ENT 00079730) (WFBM); 08 Aug 1965, D. S. Horning, Jr., 1♂ (UCR_ENT 00079731) (WFBM); 11 Aug 1965, Carol J. Horning, 1♂ (UCR_ENT 00079732) (WFBM); 17 Aug 1965, Carol J. Horning, 5♂ (UCR_ENT 00079733-UCR_ENT 00079737), 3♀ (UCR_ENT 00079785-UCR_ENT 00079787) (WFBM); 17 Aug 1965, D. S. Horning, Jr., 4♀ (UCR_ENT 00079781-UCR_ENT 00079784) (WFBM); 24 Aug 1963, R. B. Roberts, 1♀ (UCR_ENT 00079780) (WFBM); 09 Aug 1965, D. S. Horning, Jr., 1♀ (UCR_ENT 00079798) (WFBM); 13 Aug 1964, D. S. Horning, Jr., 1♀ (UCR_ENT 00079799) (WFBM). **Canyon Co.:** 3 mi NW Parma, 43.81918°N, 116.98000°W, 29 Jul 1958, H. W. Homan, 2♂ (UCR_ENT 00079698, UCR_ENT 00079699), 1♀ (UCR_ENT 00079807) (WFBM). Caldwell, 43.66306°N, 116.68639°W, 8/6/1964, L. de los Reyes, 1♂ (UCR_ENT 00080173) (WFBM). Parma, 43.78606°N, 116.94440°W, 19 Aug 1964, Unknown, 1♂ (UCR_ENT 00079700) (WFBM). Parma, 43.78516°N, 116.94320°W, 26 Jul 1929, P. Rice, 2♂ (UCR_ENT 00079701, UCR_ENT 00079702) (WFBM). Parma, 43.78611°N, 116.94277°W, 06 Aug 1958, H. W. Homan, 1♀ (UCR_ENT 00079806) (WFBM). **Cassia Co.:** 3 mi N of Malta, 42.35436°N, 113.37142°W, 12 Sep 1965, W. F. Barr, 7♂ (UCR_ENT 00079738-UCR_ENT 00079744), 1♀ (UCR_ENT 00079774) (WFBM). 3 mi NW of Malta, 42.34243°N, 113.41227°W, 12 Sep 1965, R. L. Penrose, 1♂ (UCR_ENT 00079745) (WFBM). 3.4 mi E Idaho, 42.41395°N, 113.33320°W, 09 Aug 1955, R. A. Mackie, 2♂ (UCR_ENT 00079688, UCR_ENT 00079689) (WFBM); 08 Aug 1955, R. A. Mackie, 2♀ (UCR_ENT 00079809, UCR_ENT 00079810) (WFBM). 4 mi E Idaho, 42.41503°N, 113.32081°W, 09 Aug 1955, W. F. Barr, 2♂ (UCR_ENT 00079686, UCR_ENT 00079687) (WFBM). 4.3 mi E Idaho, 42.41544°N, 113.31534°W, 09 Aug 1955, R. A. Mackie, 1 Nymph (UCR_ENT 00080197) (WFBM). 9 mi E of Malta, 42.30893°N, 113.19220°W, 12 Aug 1980, R. P. Wight, 1♂ (UCR_ENT 00079746) (WFBM); 31 Jul 1980, R. P.

Wight, 1 Nymph (UCR_ENT 00080193), 1♂ (UCR_ENT 00079747) (WFBM); 11 Aug 1980, R. P. Wight, 1♂ (UCR_ENT 00079748) (WFBM); 21 Sep 1980, R. P. Wight, 1♀ (UCR_ENT 00079773) (WFBM); 16 Jul 1981, R. P. Wight, 3 Nymph (UCR_ENT 00080194-UCR_ENT 00080196) (WFBM). Strevell, 42.00603°N, 113.20360°W, 03 Sep 1925, R. W. Haegele, 1♀ (UCR_ENT 00080192) (WFBM). **Elmore Co.:** 13 mi N of Mountain Home, 43.32137°N, 115.69028°W, 18 Jun 1966, A. R. Gittins, 1 Nymph (UCR_ENT 00080198) (WFBM), 5 mi N Mt. Home, 43.20538°N, 115.69119°W, 09 Sep 1965, W. F. Barr, 2♀ (UCR_ENT 00079812, UCR_ENT 00079813) (WFBM). Hot Springs, 9 mi N Mt. Home, 43.26332°N, 115.69119°W, 30 Jul 1949, W. F. Barr, 1♀ (UCR_ENT 00079811) (WFBM). Mountain Home, 43.13694°N, 115.69444°W, 17 Sep 1969, R. W. Portman, 6♀ (UCR_ENT 00079814-UCR_ENT 00079819) (WFBM). **Fremont Co.:** Juniper Butte Dunes, 12 mi W Anthony, 43.97805°N, 111.92587°W, 3 August 1986, J. N. Hogue, 1♀ (UCR_ENT 00095771) (LACM). Sand Dunes, Saint Anthony, 43.96243°N, 111.85462°W, 8/7/1965, L. S. Hawkins, Jr., 1♂ (UCR_ENT 00080169) (WFBM). **Gooding Co.:** 3 mi S of Gooding, 42.89466°N, 114.71303°W, 5/9/1958, A. R. Gittins, 1♂ (UCR_ENT 00080171) (WFBM). **Lincoln Co.:** 19 mi N Shoshone, 43.19746°N, 114.40719°W, 02 Sep 1965, R. L. Westcott, 3♂ (UCR_ENT 00079751-UCR_ENT 00079753), 2♀ (UCR_ENT 00079768, UCR_ENT 00079769) (WFBM). Dietrich Butte, 42.94593°N, 114.21421°W, 14 Aug 1958, H. W. Smith, 1♂ (UCR_ENT 00079695), 1♀ (UCR_ENT 00079803) (WFBM). **Nez Perce Co.:** 5.8 mi. S.W. Lewiston, 46.31391°N, 117.10769°W, 23 Sep 1966, L. G. Hamp, 1♂ (UCR_ENT 00067540) (UCR). Lewiston, 46.41667°N, 117.01667°W, 21 Jul 1925, C. L. Fox, 1♂ (UCR_ENT 00047824), 1♀ (UCR_ENT 00047834) (CAS); 22 Jul 1925, C. L. Fox, 4♂ (UCR_ENT 00047825-UCR_ENT 00047828), 4♀ (UCR_ENT 00047835-UCR_ENT 00047838) (CAS); 16 Jul 1925, C. L. Fox, 2♂ (UCR_ENT 00047829, UCR_ENT 00047830) (CAS); no date provided, E. P. VanDuzee Collection, Unknown, 1♂ (UCR_ENT 00047831) (CAS). **Owyhee Co.:** 11 mi SW Grandview, 43.05297°N, 112.78832°W, 10 Sep 1955, R. A. Mackie, 1♂ (UCR_ENT 00079694), 1♀ (UCR_ENT 00079802) (WFBM). 4 mi E Sheaville, 43.12646°N, 116.97183°W, 26 Aug 1963, O. O. Fillmore, 1♀ (UCR_ENT 00079820) (WFBM). Indian Cove, 42.94306°N, 115.53278°W, 9/13/1965, A. R. Gittins, 1♂ (UCR_ENT 00080162) (WFBM). Jump Creek 10 mi N Homedale, 43.76250°N, 116.93370°W, 8/11/1963, G. P. Markin, 1♂ (UCR_ENT 00080176) (WFBM). Wickahoney, 42.45990°N, 115.98343°W, 27 Jul 1926, R. W. Haegele, 1♂ (UCR_ENT 00080208) (WFBM). **Power Co.:** 2 mi W Massacre Rocks, 42.67379°N, 113.02579°W, 12 Sep 1965, W. F. Barr, 4♂ (UCR_ENT 00079755-UCR_ENT 00079758) (WFBM). Massacre Rocks, 42.67380°N, 112.98638°W, 10 Sep 1956, Unknown, 1♀ (UCR_ENT 00080188) (WFBM). **Twinn Falls Co.:** 4 mi S Hagerman, 42.75339°N, 114.89900°W, 08 Sep 1964, W. F. Barr, 3♂ (UCR_ENT 00079760-UCR_ENT 00079762) (WFBM). **Valley Co.:** Deadwood Reservoir, 44.29400°N, 115.64600°W, 21 Aug 1956, H. C. Manis, 1♀ (UCR_ENT 00079767) (WFBM). **Washington Co.:** 2 mi S Weiser, 44.22214°N, 116.96833°W, 20 Sep 1990, J. B. Johnson, 2♀ (UCR_ENT 00079804, UCR_ENT 00079805) (WFBM). **Nevada: Douglas Co.:** Topaz Lake, 38.70430°N, 119.55150°W, 05 Jul 1968, J. Ward, 1♂ (UCR_ENT 00096340) (LACM). **Humboldt Co.:** Winnemucca Dunes, 41.11787°N, 117.73568°W, 27 Aug 1955, N. McFarland, 1♀ (UCR_ENT 00096332) (LACM). **Mineral Co.:** Huntoon Valley, Sand Dunes, 38.13778°N, 118.53917°W, 04 Sep 1973, Derham Giuliani, 1♀ (UCR_ENT 00047920) (CAS). Teels Marsh, 38.20556°N, 118.35972°W, 01 Aug 1973, Derham Giuliani, 1♀ (UCR_ENT 00047919) (CAS). **Washoe Co.:** Pyramid Lake, 40.07500°N, 119.70083°W, 27 Jul 1957, D. Rentz, 2♀ (UCR_ENT 00047921, UCR_ENT 00047922) (CAS). Pyramid Lake, 5 mi NW of Nixon, 40.01729°N, 119.54876°W, 27 Jul 1957, Cushner, 1♂ (UCR_ENT 00047876), 1♀ (UCR_ENT 00047907) (CAS). Verdi, 39.51833°N, 119.98778°W, Aug 1956, Tom Emmel, 1♂ (UCR_ENT 00095783), 6♀ (UCR_ENT 00095876-UCR_ENT 00095880, UCR_ENT 00095939) (LACM); Late Aug 1956, Tom Emmel, 1♂ (UCR_ENT 00096331) (LACM). **White Pine Co.:** 15 mi NW of Utah state line Route 6, 39.12159°N, 114.29322°W, 09 Sep 1968, P. S. Bartholomew, 1♀ (UCR_ENT 00047906) (CAS). **Oregon: Douglas Co.:** Calpooya Creek, 43.42500°N, 123.30300°W, 17 Sep 2012, A.J. Baker, 1♂ (UCR_ENT 00110121) (UCR). Diamond Lake, 43.17861°N, 122.13888°W, 16 Jul 1934, E. C. Van Dyke, 1♀ (UCR_ENT 00079034) (CAS). **Klamath Co.:** Algoma, Klamath Lake, 42.34700°N, 121.81600°W, 31 Aug 1947, Hugh B. Leech, 1♂ (UCR_ENT 00079029), 1♀ (UCR_ENT 00079030) (CAS). Klamath Falls, 42.23056°N, 121.79833°W, 28 Jul 1936, E. C. Van Dyke, 1♀ (UCR_ENT 00047934) (CAS); 03 Sep 1950, B. Malkin, 1♂ (UCR_ENT 00048264), 1♀ (UCR_ENT 00079033) (CAS). **Lake Co.:** 15 mi SW Plush, 42.27185°N, 120.13043°W, 06 Aug 1972, D. E. Foster, 2♀ (UCR_ENT 00079791, UCR_ENT 00079792) (WFBM). Summer Lake, 42.82786°N, 120.79559°W, 28 Jul 1930, H. A. Scullen, 1♀ (UCR_ENT 00047813) (CAS). **Malheur Co.:** Owyhee Lake, 43.46139°N, 117.33833°W, 14 Aug 1989, A. Al-Raeesi, 1♀ (UCR_ENT 00079790) (WFBM). **Union Co.:** Union, 45.21035°N, 117.86171°W, 08 Sep 1961, R.H. Abbott, 1♂ (UCR_ENT 00079759), 1♀ (UCR_ENT 00079795) (WFBM). **Washington: Asotin Co.:** 15 mi S Clarkston, 46.19923°N, 117.04417°W, 12 Sep 1985, D. J. Schotzko, 1♀ (UCR_ENT 00079771) (WFBM). **Benton Co.:** Hanford Site ALE, Rattlesnake Spring, 46.39736°N, 119.69811°W, August 1998, C. Looney, 2♂ (UCR_ENT 00079749, UCR_ENT 00079750), 1♀ (UCR_ENT 00079789) (WFBM). **Franklin Co.:** Palouse Falls, 46.66361°N, 118.22361°W, 03 Aug 1988, R. Old, 1♂ (UCR_ENT 00079765), 1♀ (UCR_ENT 00079766) (WFBM); 13 Aug 1971, A. R. Gittins, 1♀ (UCR_ENT 00079796) (WFBM). **Kittitas Co.:** Ellensburg, 46.99638°N, 120.54777°W, 26 Sep 1954, B. Malkin, 3♂ (UCR_ENT 00047873-UCR_ENT 00047875) (CAS). Whiskey Dick Canyon, 8 mi N of Vantage, 47.02456°N, 120.02228°W, 04 Aug 1954, B. Malkin & E. Swanson, 15♂ (UCR_ENT 00047858-UCR_ENT 00047872), 8♀ (UCR_ENT 00047909-UCR_ENT 00047916) (CAS). **Okanogan Co.:** Green Lake Wn., 48.44779°N, 119.62920°W, 19 Aug 1967, D. S. Horning, Jr., 1♀ (UCR_ENT 00079797) (WFBM). **Walla Walla Co.:** Lowden, 46.05611°N, 118.58583°W, 17 Aug 1938, E. W. Jones, 1♂ (UCR_ENT 00079710) (WFBM). Walla Walla, 46.06470°N, 118.34190°W, 9- -36, E. S. Booth, 1♀ (UCR_ENT 00047923) (CAS); 11 Oct 1939, E. W. Jones, 1♀ (UCR_ENT 00079793) (WFBM); 12 Sep 1935, E. W. Jones, 1♀ (UCR_ENT 00079794) (WFBM). **Whitman Co.:** Steptoe Canyon, 10 mi. SW Colton, 46.45099°N, 117.20627°W, 11 Sep 1993, C. Looney, 1♀ (UCR_ENT 00080190) (WFBM). Wawaiwai, 46.62114°N, 117.32986°W, 18 Jul 1951, Unknown, 1♂ (UCR_ENT 00079754) (WFBM). Wawawai, 46.63670°N, 117.37830°W, no date provided, W. M. Mann, 3♀ (UCR_ENT 00079043-UCR_ENT 00079045) (CAS), 3♂ (UCR_ENT 00095794-UCR_ENT 00095796), 3♀ (UCR_ENT 00095872-UCR_ENT 00095874) (LACM); no date provided, Unknown, 9♂ (UCR_ENT 00095785-UCR_ENT 00095793), 4♀ (UCR_ENT 00095867-UCR_ENT 00095870) (LACM); 9: 6, 08, W. M. Mann, 3♂ (UCR_ENT 00095797-UCR_ENT 00095799), 1♀ (UCR_ENT 00095871) (LACM). **Yakima Co.:** Yakima Firing Center, NE

of Yakima; canyon behind Squaw Tit, 46.70000°N, 120.42000°W, 24 Jul 1965, W.R. Icenogle, 2♂ (UCR_ENT 00123180, UCR_ENT 00123181), 4♀ (UCR_ENT 00123176-UCR_ENT 00123179) (UCR).

***Phymata mexicana* Melin, 1931**

Total records reported: 59, Total Adult Male: 28, Total Adult Female: 28

Specimens Examined: **MEXICO: Chiapas: Ixtacomitlán Municipality Co.:** Rio Blanco, 16.16409°N, 92.28665°W, 10 Dec 1985, F. Arias, R. Barba, L. Cervantes, 2♀ (UCR_ENT 00034282, UCR_ENT 00034283) (UCR). **None or Unknown Co.:** 20 km NW Ocozacoautla, 16.88756°N, 93.50655°W, 14 May 1999, V.H. Toledo, 1♂ (UCR_ENT 00034304) (UCR). **unknown Co.:** km 89. Villa Hermosa - Escarcega, 17.69912°N, 92.24983°W, 25 Jun 1989, A. Cadena and L. Cervantes, 1♂ (UCR_ENT 00034301) (UCR). **Guerrero: Iguala Co.:** Km. 2 a Microondas Tuxpan, 18.39278°N, 99.47417°W, 04 Apr 2013, C. Mayorga & L. Cervantes, 1♀ (UCR_ENT 00034291) (UCR). **None or Unknown Co.:** 2 km NW of Pilcaya, 18.76810°N, 99.69280°W, 17 Aug 2017, P. Masonick & C. Rosas, 1♂ (UCR_ENT 00127586) (UCR). Apaxtla km 22 Apaxtla-El Caracol, 18.02056°N, 99.98722°W, 11 Sep 2006, L. Cervantes and L. Lozada, 1♂ (UCR_ENT 00034299) (UCR). Km 7 S de la Concepcion, 18.74333°N, 99.68500°W, 20 Nov 2003, T.J. Henry, H. Brailovsky and L. Cervantes, 1♀ (UCR_ENT 00034281) (UCR). **Jalisco: Km. 56 Carr. Leon - Aguascalientes desvioacion de San Juan de los Lagos,** 21.45086°N, 102.20037°W, 10 Apr 2002, H. Brailovsky and E. Barrera, 1♂ (UCR_ENT 00034302), 2♀ (UCR_ENT 00034290, UCR_ENT 00034295) (UCR). km. 4 El Tuito: Tehuamixtle, 20.23667°N, 105.57555°W, 23 Nov 1991, E. Ramirez & J. Villa, 2♀ (UCR_ENT 00034280, UCR_ENT 00034296) (UCR). **Mexico: Estado de Mexico Co.:** Santiago, 19.40070°N, 99.94470°W, 02 Mar 2003, H. Brailovsky and E. Barrera, 1♀ (UCR_ENT 00034289) (UCR). **Michoacan: None or Unknown Co.:** Coahuayana, 18.70000°N, 103.65830°W, 17 Sep 1993, E. Ramirez & J. Villa, 1♀ (UCR_ENT 00034285) (UCR). **Morelos: None or Unknown Co.:** 0.5 km N of Temimilcingo, 8.73816°N, 99.15660°W, 19 Aug 2017, P. Masonick & C. Rosas, 1♂ (UCR_ENT 00127579) (UCR). 1.5 km S of San Pablo Hidalgo, 18.56600°N, 99.03617°W, 15 Aug 2017, P. Masonick & C. Rosas, 6♂ (UCR_ENT 00127556-UCR_ENT 00127561), 2♀ (UCR_ENT 00127556, UCR_ENT 00127556) (UCR). Zona Arqueologica Chalcatzingo, 18.67550°N, 98.77216°W, 14 Aug 2017, P. Masonick & C. Rosas, 2♂ (UCR_ENT 00127584, UCR_ENT 00127585) (UCR). slopes W of Ticumbán, 18.75830°N, 99.13100°W, 19 Aug 2017, P. Masonick & C. Rosas, 2♂ (UCR_ENT 00127580, UCR_ENT 00127581), 1♀ (UCR_ENT 00127582) (UCR). **Oaxaca: None or Unknown Co.:** Dominguillo, 17.63585°N, 96.90195°W, 22 Apr 1998, M. Morales, 1♀ (UCR_ENT 00034287) (UCR). Tehuantepec, 16.33333°N, 95.23333°W, 01 Jun 1953, T.J. Condit, 1♂ (UCR_ENT 00067578) (UCR). Valle Nacional, San Mateo Yetla, 17.75593°N, 96.31577°W, 13 Oct 1990, E. Barrera, A. Cadena and E. Ramirez, 1♂ (UCR_ENT 00034303) (UCR). **Puebla: None or Unknown Co.:** 3 km to the N of Tecatzingo, 18.73988°N, 97.67102°W, 27 Feb 1992, E. Barrera, G. Ortega, and C. Mayorga, 1♀ (UCR_ENT 00034294) (UCR). Villa Avila Camacho, 20.38563°N, 97.88027°W, 30 Apr 1984, H. Brailovsky, 1♀ (UCR_ENT 00034297) (UCR). **Queretaro: None or Unknown Co.:** Queretaro, 20.59977°N, 100.38993°W, 28 Sep 2007 - 30 Sep 2007, K.A. Brailovsky, 1♂ (UCR_ENT 00034305) (UCR). **Quintana Roo: None or Unknown Co.:** km 60 carr. Chetumal - Puerto Juarez, 19.03147°N, 88.11698°W, 14 Mar 1982, M. Garcia, 1♂ (UCR_ENT 00034298) (UCR). **Veracruz: None or Unknown Co.:** Boca del Rio - Alvarado, 18.93333°N, 96.01967°W, 13 Nov 2002, F. Heytzeck, 1♀ (UCR_ENT 00034288) (UCR). Filobobos, 19.96722°N, 97.21528°W, 19 May 2012, H. Brailovsky and E. Barrera, 1♂ (UCR_ENT 00034300) (UCR). Laguna Econdida, 18.59300°N, 95.08380°W, 10 Aug 2017, P. Masonick, C. Rosas, H. Brailovsky, E. Barrera, 1♂ (UCR_ENT 00127583), 2♀ (UCR_ENT 00127563, UCR_ENT 00127564) (UCR). Laguna Escondida, 18.59280°N, 95.08383°W, 10 Aug 2017, P. Masonick, C. Rosas, H. Brailovsky, E. Barrera, 3 Nymph (UCR_ENT 00127568-UCR_ENT 00127570), 6♂ (UCR_ENT 00127565-UCR_ENT 00127567, UCR_ENT 00127571-UCR_ENT 00127573), 6♀ (UCR_ENT 00127574-UCR_ENT 00127578, UCR_ENT 00127608) (UCR). **Yucatan: None or Unknown Co.:** Km 41 cart - Valladolid - Rio Lagartos, 21.10222°N, 88.16505°W, 30 Apr 1982, V. Melendez, 1♀ (UCR_ENT 00034284) (UCR). Tekax-Tzucacab, 20.33472°N, 89.16111°W, 11 Sep 1994, E. Barrera, 1♀ (UCR_ENT 00034286) (UCR). **Zacatecas: None or Unknown Co.:** 15 km W of El Baluarte, 23.40155°N, 103.18233°W, 23 Oct 2005, R. Marino, 1♀ (UCR_ENT 00034292) (UCR).

***Phymata mystica* Evans, 1931**

Total records reported: 96, Total Adult Male: 54, Total Adult Female: 40

Specimens Examined: **USA: Florida: Alachua Co.:** Gainesville, 29.65163°N, 82.32483°W, June 2007, J.M. Leavengood, Jr., 1♂ (UCR_ENT 00110128), 1♀ (UCR_ENT 00110127) (UCR). Gainesville, Natural Area Drive, 29.63463°N, 82.36734°W, 02 Apr 2007, J.M. Leavengood, Jr., 3♂ (UCR_ENT 00110129-UCR_ENT 00110130, UCR_ENT 00119006), 1♀ (UCR_ENT 00123151) (UCR); 01 Apr 2007, J.M. Leavengood, Jr., 1♂ (UCR_ENT 00123150) (UCR). Gainesville: University of Florida Natural Area Teaching Lab on Natural Area/Surge Area Drive, 29.63298°N, 82.36910°W, Spring 2003, J. Leavengood, 1♂ (UCR_ENT 00110141), 1♀ (UCR_ENT 00110140) (UCR); 24 Aug 2003, J. Leavengood, 1♀ (UCR_ENT 00110142) (UCR). **Brevard Co.:** Grant, 27.92861°N, 80.52667°W, 6/7/1982, B. H., 1♂ (UCR_ENT 00095717) (LACM). **Citrus Co.:** Inverness, 28.83737°N, 82.33623°W, no date provided, Robertson, 1♂ (UCR_ENT 00079239) (CAS). **Dade Co.:** Hwy 9336 near E edge of Everglades National Park, 25.39581°N, 80.57815°W, 22 Jun 1990, M.A. Ivie, 2♀ (UCR_ENT 00124125, UCR_ENT 00124126) (MTEC). **Lee Co.:** Estero, 26.43778°N, 81.80694°W, 06 May 1908 - 12 May 1908, Van Duzee, 1♂ (UCR_ENT 00079241) (CAS). Fort Myers, 26.64028°N, 81.87250°W, 03 May 1908 - 05 May 1908, E. P. Van Duzee, 5♂ (UCR_ENT 00079234-UCR_ENT 00079238), 2♀ (UCR_ENT 00079252, UCR_ENT 00079253) (CAS). **Miami-Dade Co.:** Everglades N. P., 25.41494°N, 80.92709°W, 04 Dec 1970, L. D. & M. D Anderson, 1♂ (UCR_ENT 00067538) (UCR). Everglades National Park 5 mi NW of NAS, 25.37217°N, 80.88182°W, 22 Feb 1946, C. F. Harbison, 2♂ (UCR_ENT 00078786, UCR_ENT 00078787) (SDNH). Flamingo, Everglades National Park, 25.15118°N, 80.92470°W, 04 Dec 1970, W. F. Barr, 1♂ (UCR_ENT 00079926), 3♀ (UCR_ENT 00079928-UCR_ENT 00079930) (WFBM). Florida City, 25.44750°N, 80.47944°W, 29 Nov 1970, R. L. Westcott, 1♂ (UCR_ENT 00079927) (WFBM). Largo (perhaps it refers to Key Largo),

25.13336°N, 80.39532°W, 6/26/1949, F. H. Chermock, 1♂ (UCR_ENT 00095716) (LACM). **Monroe Co.:** Key Largo, 25.11982°N, 80.41790°W, 24 Feb 1940, E. C. Van Dyke, 1♂ (UCR_ENT 00079240), 2♀ (UCR_ENT 00079249, UCR_ENT 00079250) (CAS); no date provided, Unknown, 1♀ (UCR_ENT 00079251) (CAS). **Orange Co.:** Orlando, 28.53805°N, 81.37944°W, 29 Jul 1964, C. Cushner, 1♀ (UCR_ENT 00079247) (CAS); 2 July 1944, W. O. Griesel, 1♀ (UCR_ENT 00095720) (LACM). Orlando, meadow nr Pointe Plaza Ave., 28.43500°N, 81.46760°W, 22 Sep 2016, P. Masonick, 2♂ (UCR_ENT 00127467, UCR_ENT 00127587), 1♀ (UCR_ENT 00127588) (UCR). Orlando, meadow nr Tradeshow Road, 28.42510°N, 81.45460°W, 22 Sep 2016 - 30 Sep 2016, P. Masonick, 14♂ (UCR_ENT 00127468-UCR_ENT 00127481), 6♀ (UCR_ENT 00127482-UCR_ENT 00127487) (UCR). **Palm Beach Co.:** Royal Palm Beach, 26.70806°N, 80.23083°W, 28 Jan 1959, A.L. Melander, 1♂ (UCR_ENT 00063056) (UCR). **Pinellas Co.:** Gulfport, 27.74840°N, 82.70340°W, no date provided, A. G. Reynolds, 1♂ (UCR_ENT 00079244) (CAS); XI, Reynolds, 1♀ (UCR_ENT 00079248) (CAS). **Putnam Co.:** Crescent City, 29.43000°N, 81.51080°W, Apr 1908, Van Duzee, 1♂ (UCR_ENT 00079242) (CAS). **St. Lucie Co.:** Savannas Preserve State Park, 27.24574°N, 80.25024°W, 16 Jul 2011, C. Weirauch, 1♀ (UCR_ENT 00071885) (UCR). Savannas Preserve State Park, 27.29944°N, 80.27194°W, 16 Jul 2011, J. Mottern, 1♂ (UCR_ENT 00104853) (UCR). Savannas Preserve State Park Visitor Center, 27.30019°N, 80.27222°W, 16 Jul 2011, C. Weirauch, 3♂ (UCR_ENT 00071881, UCR_ENT 00071883, UCR_ENT 00071884), 2♀ (UCR_ENT 00071876, UCR_ENT 00071882) (UCR). **Sumter Co.:** Wildwood, 28.84300°N, 82.04600°W, 28 Sep 2016, C. Weirauch, 2 Nymph (UCR_ENT 00127492, UCR_ENT 00127493), 2♂ (UCR_ENT 00127488, UCR_ENT 00127491), 2♀ (UCR_ENT 00127489, UCR_ENT 00127490) (UCR). **Taylor Co.:** 8 mi N Perry, 30.25907°N, 83.62383°W, 12 Jul 1953, E. S. Ross, 1♂ (UCR_ENT 00079245) (CAS). **Volusia Co.:** Daytona, 29.21081°N, 81.02283°W, 06 Apr 1919, C. W. Johnson, 1♀ (UCR_ENT 00079246) (CAS). **Georgia: Thomas Co.:** Thomasville, 30.80000°N, 83.96666°W, 28 Mar 1949, T. J. Haines, 1♀ (UCR_ENT 00095905) (LACM). **Ware Co.:** 8 mi S of Waycross, 31.09743°N, 82.35402°W, 16 Jul 1953, E. S. Ross, 1♂ (UCR_ENT 00079243) (CAS). **Louisiana: Beauregard Co.:** DeRidder, 30.84631°N, 93.28905°W, 10 May 1967, D. Hicks, 4♂ (UCR_ENT 00095882-UCR_ENT 00095884, UCR_ENT 00095887), 9♀ (UCR_ENT 00095915-UCR_ENT 00095919, UCR_ENT 00095921-UCR_ENT 00095924) (LACM). **Mississippi: Harrison Co.:** Biloxi, 30.39583°N, 88.88528°W, 6/23/1964, R. T. Taylor, 1♂ (UCR_ENT 00095715) (LACM). **Tennessee: Benton Co.:** Camden, 36.05890°N, 88.09780°W, 09 Aug 1953, R.X. Schick, 1♂ (UCR_ENT 00095885) (LACM).

***Phymata obscura* Kormilev, 1957**

Total records reported: 179, Total Adult Male: 121, Total Adult Female: 58

Specimens Examined: **USA: Idaho: Ada Co.:** Boise, 43.59722°N, 116.29972°W, 29 Sep 1950, H. C. Manis, 1♂ (UCR_ENT 00079940) (WFBM). **Adams Co.:** M.F. Weiser Rd. 9 mi SE of Council, 44.63765°N, 116.30847°W, 08 Aug 1979, R. Hurley, 1♀ (UCR_ENT 00120245) (MTEC). **Benewah Co.:** Logging Slash, Bald Mountain, 47.03157°N, 116.57182°W, 29 Jul 1965, Unknown, 1♂ (UCR_ENT 00079952) (WFBM). **Boise Co.:** Lucky Peak Reservoir, 43.53009°N, 116.02697°W, 18 Aug 1978, M. Ivie, 1♂ (UCR_ENT 00120247) (MTEC). **Bonneville Co.:** East Butte 20 mi E Idaho Falls, 43.60717°N, 111.66462°W, 04 Aug 1958, R. W. Portman, 1♀ (UCR_ENT 00079990) (WFBM). **Butte Co.:** nr. Howe, 43.63200°N, 113.11600°W, 03 Aug 2015, A. Baker and J. Witter, 1♂ (UCR_ENT 00127627) (UCR). **Canyon Co.:** 3 mi NW Parma, 43.81918°N, 116.98000°W, 29 Jul 1958, H. W. Homan, 1♂ (UCR_ENT 00079697) (WFBM). Parma, 43.78611°N, 116.94277°W, 30 Aug 1965, L. de los Reyes, 1♂ (UCR_ENT 00079763) (WFBM). **Elmore Co.:** 5 mi N Mt. Home, 43.20538°N, 115.69119°W, 09 Sep 1965, W. F. Barr, 2♂ (UCR_ENT 00079691, UCR_ENT 00079692) (WFBM). Hot Springs, 9 mi N Mt. Home, 43.26332°N, 115.69119°W, 30 Jul 1949, W. F. Barr, 1♂ (UCR_ENT 00079690) (WFBM). Mountain Home, 43.13694°N, 115.69444°W, 17 Sep 1969, R. W. Portman, 1♂ (UCR_ENT 00079693) (WFBM). **Franklin Co.:** 3 mi W Dayton, 42.11261°N, 112.05195°W, 12 Aug 1977, M. W. Hanks, 1♂ (UCR_ENT 00079881) (WFBM). **Fremont Co.:** Saint Anthony Sand Dunes, 44.01450°N, 111.78560°W, 17 Aug 1986, M. Ivie, 2♂ (UCR_ENT 00120248, UCR_ENT 00120249) (MTEC). Sand Dunes, 8 mi NW of Parker, T8N R39E Secs17&18, 44.03639°N, 111.82785°W, Aug 1986, R.S. Miller, 1♂ (UCR_ENT 00120246) (MTEC). **Idaho Co.:** 1.5 mi North Slate Creek, 45.66718°N, 116.28840°W, 10 Oct 1965, H. C. Manis, 1♀ (UCR_ENT 00080011) (WFBM). 1.8 mi N Slate Creek, 45.67103°N, 116.28840°W, 03 Sep 1977, R. C. Biggam, 8♂ (UCR_ENT 00079941-UCR_ENT 00079947, UCR_ENT 00079991), 7♀ (UCR_ENT 00080018-UCR_ENT 00080024) (WFBM). Salmon River, 45.40082°N, 115.61680°W, 04 Aug 1989, G. M. Chambers, 1♂ (UCR_ENT 00080004) (WFBM). Slate Creek, 45.63800°N, 116.28000°W, 19 Sep 1955, W. F. Barr, 1♂ (UCR_ENT 00079880), 1♀ (UCR_ENT 00080017) (WFBM); 22 Sep 1961, R. W. Portman, 1♂ (UCR_ENT 00079953), 1♀ (UCR_ENT 00079956) (WFBM); 18 Sep 1955, A. R. Gittins, 1♂ (UCR_ENT 00079954), 2♀ (UCR_ENT 00080012, UCR_ENT 00080016) (WFBM). Slate Creek, Hwy 95, 45.67122°N, 116.30206°W, 10 Sep 1984, J. B. Johnson, 1♂ (UCR_ENT 00079951) (WFBM). Squaw Creek, 2.5 mi W Riggins, 45.42653°N, 116.36756°W, 21 Sep 1990, J. B. Johnson, 3♂ (UCR_ENT 00079993-UCR_ENT 00079994, UCR_ENT 00080005), 3♀ (UCR_ENT 00080013-UCR_ENT 00080015) (WFBM); 29 Jul 1990, L. M. Wilson, 1♂ (UCR_ENT 00079995) (WFBM). **Kootenai Co.:** Athol, 47.94810°N, 116.70690°W, 06 Sep 2006, C. dePaulis, 3♂ (UCR_ENT 00079937-UCR_ENT 00079939) (WFBM). **Latah Co.:** 2 mi S Moscow, 46.69790°N, 116.99676°W, 30 Sep 1998, F. W. Merickel, 1♀ (UCR_ENT 00079973) (WFBM). Moscow, 46.72462°N, 117.01501°W, 11 Sep 2009, A. W. Rotton, 1♂ (UCR_ENT 00079872) (WFBM); 30 Sep 1954, B. McDaniel, 1♀ (UCR_ENT 00079974) (WFBM). Moscow, 46.73021°N, 117.00672°W, 24 Sep 1936, Unknown, 1♂ (UCR_ENT 00079873) (WFBM). **Lemhi Co.:** 40 Miles N Salmon, 45.52257°N, 113.93320°W, 9/3/1955, N. McFarland, 1♀ (UCR_ENT 00095713) (LACM). 7 mi S Gibbonsville, 45.45314°N, 113.92184°W, 06 Sep 1961, R. W. Portman, 14♂ (UCR_ENT 00079882-UCR_ENT 00079892, UCR_ENT 00079948-UCR_ENT 00079950), 9♀ (UCR_ENT 00079957-UCR_ENT 00079965) (WFBM). Gibbonsville, 45.55556°N, 113.92305°W, 06 Sep 1961, R. W. Portman, 1♀ (UCR_ENT 00079966) (WFBM). North Fork, 45.40611°N, 113.99388°W, 06 Sep 1961, R. W. Portman, 1♂ (UCR_ENT 00079894) (WFBM). Salmon, 45.17806°N, 113.90277°W, 14 Sep 1957, H. C. Manis, 8♂ (UCR_ENT 00079861-UCR_ENT 00079868), 1♀ (UCR_ENT 00079972) (WFBM). **Lewis Co.:** Nez Perce, 46.23444°N, 116.23972°W, 21 Sep 1967, R. W. Portman, 5♂ (UCR_ENT 00079856-UCR_ENT

00079860), 5♀ (UCR_ENT 00079967-UCR_ENT 00079971) (WFBM). **Nez Perce Co.:** 1 mi S Lewiston, 46.40207°N, 117.01760°W, 10 May 1967, R. L. Westcott and J. A. Westcott, 2♂ (UCR_ENT 00079996, UCR_ENT 00079997) (WFBM). 1 mi. SW Arrow Jct, 46.46059°N, 116.78767°W, 08 Sep 1976 - 11 Sep 1976, R. C. Biggam, 6♂ (UCR_ENT 00079874-UCR_ENT 00079879), 3♀ (UCR_ENT 00079976-UCR_ENT 00079978) (WFBM). Arrow, 46.47800°N, 116.76800°W, 02 Oct 1909, J. M. Aldrich, 2♂ (UCR_ENT 00079870, UCR_ENT 00079871), 1♀ (UCR_ENT 00079975) (WFBM). Central Grade, 46.46500°N, 116.90850°W, 20 Jul 1953, W. F. Barr, 5♂ (UCR_ENT 00079998-UCR_ENT 00080002), 4♀ (UCR_ENT 00080007-UCR_ENT 00080010) (WFBM). Coyote Grade, 46.52347°N, 116.85305°W, 29 Sep 1951, W. F. Barr, 1♂ (UCR_ENT 00079869) (WFBM). Lewiston, 46.41667°N, 117.01667°W, 09 Oct 1963, E. Richard Logan, 1♂ (UCR_ENT 00080003) (WFBM). Myrtle, 46.49700°N, 116.72600°W, 07 Oct 1966, L. G. Hamp, 1♂ (UCR_ENT 00079992), 1♀ (UCR_ENT 00080025) (WFBM); 27 Sep 1967, R. L. Westcott, 1♀ (UCR_ENT 00080026) (WFBM); 16 Aug 1967, R. E. Morel, 1♀ (UCR_ENT 00080027) (WFBM). Spalding, 46.44680°N, 116.81740°W, 29 Sep 1951, W. F. Barr, 36♂ (UCR_ENT 00079821-UCR_ENT 00079855, UCR_ENT 00079893), 9♀ (UCR_ENT 00079981-UCR_ENT 00079989) (WFBM); 09 Sep 1960, R. L. Williamson, 1♀ (UCR_ENT 00079979) (WFBM); 12 Sep 1951, W. F. Barr, 1♀ (UCR_ENT 00079980) (WFBM). **Washington Co.:** 2 mi S Weiser, 44.22214°N, 116.96833°W, 20 Sep 1990, J. B. Johnson, 1♂ (UCR_ENT 00079696) (WFBM). **Oregon: Union Co.:** Alicel, 45.40444°N, 117.97880°W, 29 Aug 1961, R.H. Abbott, 1♂ (UCR_ENT 00079725) (WFBM). **Washington: Okanogan Co.:** Green Lake Wn., 48.44779°N, 119.62920°W, 19 Aug 1967, D. S. Horning, Jr., 1♂ (UCR_ENT 00079711) (WFBM).

Phymata pacifica Evans, 1931

Total records reported: 932, Total Adult Male: 531, Total Adult Female: 386

Specimens Examined: **MEXICO: Baja California: Baja California Sur Co.:** 1 km W El Centenario, 24.11070°N, 110.44999°W, 9/26/1978, W. F. Barr, 2♂ (UCR_ENT 00080165, UCR_ENT 00080166), 1♀ (UCR_ENT 00080182) (WFBM). 1 mi. S Bahia de Los Angeles, 28.93646°N, 113.56196°W, 11 Jun 1967, E. L. Sleeper & E. M. Fisher, 1♂ (UCR_ENT 00099033) (CAS). 18 km SE Todos Santos, 23.33786°N, 110.09122°W, 9/24/1978, A. R. Gittins, 1♂ (UCR_ENT 00080164) (WFBM). 24 km SW San Pedro, 23.77803°N, 110.43421°W, 9/24/1978, W. F. Barr, 2♂ (UCR_ENT 00080160, UCR_ENT 00080161) (WFBM). **None or Unknown Co.:** 12 mi SSE San Vicente, 31.16933°N, 116.17609°W, 8/17/1980, W. F. Barr, 2♂ (UCR_ENT 00080168, UCR_ENT 00080202) (WFBM). 12 mi. E. El Rosario, 30.05810°N, 115.51362°W, 11 Jun 1979, J. D. Pinto, 1;u (UCR_ENT 00061630) (UCR). 2 mi SW Loreto, 25.99614°N, 111.37277°W, 07 Dec 1977, G.S. Forbes, 2♂ (UCR_ENT 00078909, UCR_ENT 00078910) (SDNH). San Borjas, 28.83333°N, 114.11666°W, 14 Oct 1941, F. Gander, 1♂ (UCR_ENT 00078914) (SDNH). **Tecate Municipality Co.:** 3 mi. N San Antonio, 30.81350°N, 115.60930°W, 09 Oct 1968 - 10 Oct 1968, Sleeper & Moore, 1♀ (UCR_ENT 00099019) (CAS). **Baja California Norte: Ensenada Municipality Co.:** 10 km S. Valle de la Trinidad, 31.27737°N, 115.72074°W, 02 Jul 1981, W.F. Barr, 1♀ (UCR_ENT 00080181) (WFBM). 2 km N of Santa Rosalia, 28.71241°N, 114.26971°W, 15 May 2009, C. Weirauch, 2♂ (UCR_ENT 00104840, UCR_ENT 00104852) (UCR). 3 km E of Santa Rosalia, 28.69740°N, 114.17408°W, 15 May 2009, C. Weirauch, 1♂ (UCR_ENT 00104820), 1♀ (UCR_ENT 00104848) (UCR). 3 km off Hwy 1 on Rd to Santa Rosalia, 28.71778°N, 114.12978°W, 15 May 2009, C. Weirauch, 2♀ (UCR_ENT 00082295, UCR_ENT 00104844) (UCR). 5 km E of Chapala on Hwy 5, 29.42175°N, 114.33603°W, 13 May 2009, C. Weirauch, 3♂ (UCR_ENT 00104843, UCR_ENT 00104845, UCR_ENT 00104851), 1♀ (UCR_ENT 00104819) (UCR). 5 km E of El Rosario on Hwy 1, 30.09368°N, 115.67910°W, 16 May 2009, C. Weirauch, 1♀ (UCR_ENT 00082296) (UCR). 6 km E of Santa Rosalia, 28.70676°N, 114.15473°W, 15 May 2009, C. Weirauch, 1♂ (UCR_ENT 00104830), 1♀ (UCR_ENT 00104850) (UCR). **None or Unknown Co.:** 1 mi. W San Borja, 28.74410°N, 113.77001°W, 12 Jun 1967 - 13 Jun 1967, E. L. Sleeper & E. M. Fisher, 1♂ (UCR_ENT 00099032) (CAS). 1.5 mi. W Rosarito, 28.63529°N, 114.04342°W, 13 Jun 1967 - 14 Jun 1967, E. L. Sleeper & E. M. Fisher, 1♂ (UCR_ENT 00099031) (CAS). 28 km E El Rosario, 30.31000°N, 115.33000°W, 04 Jul 1978 - 05 Jul 1978, E. L. Sleeper, 8♂ (UCR_ENT 00099049-UCR_ENT 00099056), 3♀ (UCR_ENT 00099041-UCR_ENT 00099042, UCR_ENT 00099048) (CAS). 6 km W San Telmo, 30.96885°N, 116.02895°W, 23 Aug 1977, E. Fisher & R. Westcott, 1♂ (UCR_ENT 00099028), 1♀ (UCR_ENT 00099024) (CAS). 78 km W of Mexicali at km 78 on Mex. highway 2, 32.50765°N, 116.23987°W, 08 Aug 1977, David Weissman and Carolyn Mullinex, 2♂ (UCR_ENT 00099035, UCR_ENT 00099036) (CAS). Escondido Bay, 30.38333°N, 115.46666°W, 24 May 1921, E. P. Van Duzee, 1♂ (UCR_ENT 00099027) (CAS). Isla Cedros, 28.18166°N, 115.21872°W, 08 Apr 1981, Stanley C. Williams, 1♂ (UCR_ENT 00099030) (CAS). Isla de Cedros, near peak of Cerro de Cedros, 28.12908°N, 115.21984°W, 27 Sep 1984, D.B. Weissman & V.F. Lee, 1♀ (UCR_ENT 00099026) (CAS). Rancho Santa Fe, 4 mi S of Maneadero, 31.66294°N, 116.57184°W, 22 Jun 1975, R. Kawin, 1♂ (UCR_ENT 00098984) (CAS). Sierra Juarez, 12 mi S of Mexicali-Tecate Hwy. along road to E Topo Ranch, 32.37160°N, 115.99572°W, 21 Jun 1973, S.C. Williams & K.B. Blair, 1♂ (UCR_ENT 00098988), 1♀ (UCR_ENT 00099034) (CAS). Sierra Juarez: Laguna Hanson, 32.04149°N, 115.90338°W, 09 Jul 1969, S. C. Williams & V. F. Lee, 1♂ (UCR_ENT 00099057) (CAS). **Baja California Sur: Comond Municipality Co.:** 17 mi. NE San Jose Comondu, 26.24119°N, 111.63059°W, 13 Nov 1968 - 14 Nov 1968, E. L. Sleeper & F. J. Moore, 1♂ (UCR_ENT 00099018) (CAS). 19 mi. SW San Miguel Comondu, 25.84822°N, 112.05123°W, 23 Jun 1967, E. L. Sleeper & E. M. Fisher, 3♂ (UCR_ENT 00099015-UCR_ENT 00099017), 2♀ (UCR_ENT 00099013, UCR_ENT 00099014) (CAS). **La Paz Municipality Co.:** 0.5 mi. NW El Triunfo, 23.80868°N, 110.11323°W, 01 Nov 1968 - 02 Nov 1968, E. L. Sleeper & F. J. Moore, 6♂ (UCR_ENT 00098997-UCR_ENT 00099002), 5♀ (UCR_ENT 00098993-UCR_ENT 00098996, UCR_ENT 00099003) (CAS). 11 mi. NW Las Cruces, 24.30882°N, 110.22400°W, 05 Dec 1968 - 06 Dec 1968, E. L. Sleeper, 1♂ (UCR_ENT 00098991), 1♀ (UCR_ENT 00098992) (CAS). 2 mi. W El Triunfo, 23.80354°N, 110.13938°W, 10 Oct 1968, E. L. Sleeper & F. J. Moore, 6♂ (UCR_ENT 00099006-UCR_ENT 00099011), 2♀ (UCR_ENT 00099004, UCR_ENT 00099005) (CAS). 22 mi. W La Paz, 24.14190°N, 110.66303°W, 25 Jun 1967, E. L. Sleeper & E. M. Fisher, 1♂ (UCR_ENT 00099012) (CAS). 4 mi. W El Triunfo, 23.80353°N, 110.17114°W, 12 Oct 1968, E. L. Sleeper & F. J. Moore, 1♂ (UCR_ENT 00098989) (CAS); 27 Nov 1968, E. L. Sleeper, 1♂ (UCR_ENT 00098990) (CAS). **Loreto Municipality Co.:** 1 mi. SW Loreto,

26.00083°N, 111.35611°W, 12 Dec 1976, G.S. Forbes, 1♀ (UCR_ENT 00099023) (CAS). 10.2 mi S Loreto, Hwy 1, 25.86415°N, 111.34125°W, 07 Nov 2003, D. K. Faulkner, 1♂ (UCR_ENT 00078918), 1♀ (UCR_ENT 00078919) (SDNH). Loreto, 26.01278°N, 111.34333°W, 07 Dec 1977, Unknown, 3♂ (UCR_ENT 00078911-UCR_ENT 00078913), 1♀ (UCR_ENT 00078920) (SDNH). Loreto, 12 min SW, 25.89934°N, 111.48943°W, 07 Dec 1977, G.S. Forbes, 1♂ (UCR_ENT 00078915) (SDNH). Loreto, 2 min SW, 25.99773°N, 111.37560°W, 07 Dec 1977, G.S. Forbes, 1♂ (UCR_ENT 00078917), 3♀ (UCR_ENT 00078921-UCR_ENT 00078923) (SDNH). Loreto, 9 min SW, 25.92827°N, 111.45120°W, 07 Dec 1977, G.S. Forbes, 1♂ (UCR_ENT 00078916) (SDNH). **None or Unknown Co.:** E. edge of Sierra Placeres, 27.58333°N, 114.50000°W, 25 Mar 1984, W.J. Pulawski, 2♂ (UCR_ENT 00099021, UCR_ENT 00099022), 1♀ (UCR_ENT 00099020) (CAS). **USA: Arizona: Santa Cruz Co.:** 20 mi above Nogales, 31.63067°N, 110.93425°W, 10 Jun 1927, J. Aug. Kusche, 1♀ (UCR_ENT 00079321) (CAS). **California: Contra Costa Co.:** Antioch, 38.00500°N, 121.80472°W, 02 Sep 1939, Unknown, 1♂ (UCR_ENT 00095970) (LACM). Nortonville, 37.95778°N, 121.88055°W, 06 Sep 1975, R. L. Langston, 1♂ (UCR_ENT 00079260) (CAS). **Fresno Co.:** Mineral Springs, 36.13929°N, 120.68243°W, 20 Aug 1982, J. A. Halstead, 3♂ (UCR_ENT 00079255-UCR_ENT 00079256, UCR_ENT 00079258) (CAS). Warthan Canyon, 37.83167°N, 122.18660°W, 10 Sep 1971, Unknown, 1♂ (UCR_ENT 00065829), 1♀ (UCR_ENT 00061606) (UCR). **Kern Co.:** Piute Mountain Road T28 1/2S R33E, 35.39587°N, 119.82330°W, 05 Sep 1971, J. P. Donahue, 2♂ (UCR_ENT 00095954, UCR_ENT 00095955) (LACM). **Lake Co.:** Clear Lake, 39.06167°N, 122.82611°W, 22 Jul 1956, D. Rentz, 1♀ (UCR_ENT 00079316) (CAS). Hidden L., 4 mi NW Lakeport, 39.09694°N, 122.95611°W, 05 Aug 1955, H. B. Leech, 1♂ (UCR_ENT 00079265) (CAS). **Los Angeles Co.:** 1 mi. W. Camp Baldy, Cold Water Cyn., 34.24065°N, 117.72840°W, 09 Sep 1965, M. Irwin, 2♂ (UCR_ENT 00066802, UCR_ENT 00066802), 2♀ (UCR_ENT 00066812, UCR_ENT 00066812) (UCR). 10 mi. W. Camp Baldy, Cold Water Cyn., 34.24902°N, 117.72102°W, 09 Sep 1965, M. Irwin, 4♂ (UCR_ENT 00066803-UCR_ENT 00066803, UCR_ENT 00066810, UCR_ENT 00066811), 2♀ (UCR_ENT 00066810, UCR_ENT 00066811) (UCR). 17000 Big Pines Hwy, 34.42919°N, 117.81422°W, 22 Aug 2014, C. Weirauch, A. Knyshev, P. Masonick, 1♀ (UCR_ENT 00104935) (UCR). Altadena, 34.18972°N, 118.13028°W, 1956, R. H. Crandall, 1♂ (UCR_ENT 00095957), 2♀ (UCR_ENT 00096028, UCR_ENT 00096029) (LACM); 10-1-1978, R. H. Crandall, 1♀ (UCR_ENT 00096027) (LACM). Angeles National Forest 8 mi. N. Sulphur Springs, 34.59550°N, 118.61333°W, 05 Aug 1981, G. Gordh, 1♂ (UCR_ENT 00066826) (UCR). Bouquet Canyon, 34.42583°N, 118.54147°W, 05 Sep 1938, J. A. Comstock, 1♂ (UCR_ENT 00096035), 1♀ (UCR_ENT 00096016) (LACM). Chatsworth, 34.25722°N, 118.60020°W, 18 Jun 1958, Unknown, 1♀ (UCR_ENT 00066825) (UCR). Claremont, 34.09667°N, 117.71889°W, no date provided, Baker, 7♂ (UCR_ENT 00079372-UCR_ENT 00079377, UCR_ENT 00079381), 3♀ (UCR_ENT 00079382-UCR_ENT 00079384) (CAS). Eaton Canyon, 34.18300°N, 118.09800°W, 20 Jun 2014, A. Baker, 6♂ (UCR_ENT 00104876-UCR_ENT 00104878, UCR_ENT 00104880-UCR_ENT 00104882), 2♀ (UCR_ENT 00104875, UCR_ENT 00104879) (UCR). Eaton Canyon, Pasadena, 34.18306°N, 118.09778°W, 30 Jul 2014, A.J. Baker and S.A. Heacox, 1♂ (UCR_ENT 00104894), 2♀ (UCR_ENT 00104892, UCR_ENT 00104893) (UCR). Glendora Mountain & Ridge Rd junction, 34.20364°N, 117.80781°W, 05 Sep 2014, C. Weirauch, R. Hoey-Camberlain, S. Frankenberg, A. Michael, 3♂ (UCR_ENT 00113558, UCR_ENT 00113560, UCR_ENT 00113563), 9♀ (UCR_ENT 00110075-UCR_ENT 00110077, UCR_ENT 00113557, UCR_ENT 00113559, UCR_ENT 00113561-UCR_ENT 00113562, UCR_ENT 00113564, UCR_ENT 00113565) (UCR). Glendora Ridge Rd at lookout, 34.22839°N, 117.67097°W, 05 Sep 2014, C. Weirauch, R. Hoey-Camberlain, S. Frankenberg, A. Michael, 1 Nymph (UCR_ENT 00113593), 9♂ (UCR_ENT 00113588-UCR_ENT 00113589, UCR_ENT 00113591-UCR_ENT 00113592, UCR_ENT 00113606-UCR_ENT 00113610), 5♀ (UCR_ENT 00113587, UCR_ENT 00113590, UCR_ENT 00113611-UCR_ENT 00113613) (UCR). Glendora Ridge Road, 34.22067°N, 117.70528°W, 05 Sep 2014, C. Weirauch, R. Hoey-Camberlain, S. Frankenberg, A. Michael, 3♂ (UCR_ENT 00113569-UCR_ENT 00113571), 6♀ (UCR_ENT 00113566-UCR_ENT 00113568, UCR_ENT 00113572-UCR_ENT 00113574) (UCR). Hidden Lake Pine Canyon, 34.70876°N, 118.54711°W, 11 Sep 1953, A. Menke, Jr., 1♂ (UCR_ENT 00095981), 1♀ (UCR_ENT 00096006) (LACM); 11 Sep 1953, Menke & Stange, 1♀ (UCR_ENT 00096001) (LACM). La Canada, 34.12220°N, 118.13030°W, 21 Mar 1982, R. M. Berwin, 1♂ (UCR_ENT 00095947) (LACM). Lone Pine Canyon Road, 34.32277°N, 117.56039°W, 30 Jul 1978, Unknown, 1♀ (UCR_ENT 00061611) (UCR). Mint Canyon, 34.41528°N, 118.45278°W, Sep 1946, Paul Greely, 1♀ (UCR_ENT 00095997) (LACM); 02 Jul 1948, Paul Greely, 1♀ (UCR_ENT 00095998) (LACM). Mt Baldy Rd N of Baldy Village, 34.24286°N, 117.64689°W, 05 Sep 2014, C. Weirauch, R. Hoey-Camberlain, S. Frankenberg, A. Michael, 1♀ (UCR_ENT 00113614) (UCR). Mt Baldy Rd N of Ice Canyon, 34.25847°N, 117.63658°W, 05 Sep 2014, C. Weirauch, R. Hoey-Camberlain, S. Frankenberg, A. Michael, 3♂ (UCR_ENT 00110071, UCR_ENT 00110081, UCR_ENT 00110082), 3♀ (UCR_ENT 00110078-UCR_ENT 00110080) (UCR). Mts near Claremont, 34.09667°N, 117.71889°W, no date provided, Baker, 2♂ (UCR_ENT 00079370, UCR_ENT 00079371) (CAS). Mts. Near Claremont, 34.16147°N, 117.71614°W, no date provided, Baker, 1;u (UCR_ENT 00079302), 14♂ (UCR_ENT 00079301, UCR_ENT 00079347, UCR_ENT 00079352-UCR_ENT 00079361, UCR_ENT 00079378, UCR_ENT 00079379), 11♀ (UCR_ENT 00079310-UCR_ENT 00079315, UCR_ENT 00079380, UCR_ENT 00079385-UCR_ENT 00079388) (CAS). Puente Hills, 34.02083°N, 117.92916°W, 17 Aug 1920, Timberlake, 1♂ (UCR_ENT 00066360), 1♀ (UCR_ENT 00066361) (UCR). San Gabriel Canyon, 34.16084°N, 117.90867°W, 15 Jul 1960, F. G. Andrews, 1♂ (UCR_ENT 00066827) (UCR); 09 Sep 1964, P. H. Sullivan, 1♂ (UCR_ENT 00095959), 1♀ (UCR_ENT 00096023) (LACM). San Gabriel Mountains, 34.27356°N, 118.02155°W, 10-3-1965, R. H. Crandall, Jr., 3♂ (UCR_ENT 00095944-UCR_ENT 00095946) (LACM); 24 Jul 1977, R. H. Crandall, 1♀ (UCR_ENT 00096014) (LACM); 01 Aug 1977, R. H. Crandall, 1♀ (UCR_ENT 00096015) (LACM). San Gabriel Mountains Castaic Quarry, 34.51000°N, 118.62000°W, 19 Aug 1967, M. Lyon, 1♂ (UCR_ENT 00123182), 1♀ (UCR_ENT 00123183) (UCR). San Gabriel Mountains Trail Canyon. 6 km NE Sunland, 34.30000°N, 118.25000°W, 01 Sep 1963, D.L. Gibo, 1♀ (UCR_ENT 00123184) (UCR). San Gabriel Mountains Vic. Tie Canyon, 34.39944°N, 118.07528°W, 8-9-1978, R. H. Crandall, 1♂ (UCR_ENT 00095958) (LACM). San Gabriel Mountains, Angeles Crest Highway, 34.34977°N, 117.94159°W, 01 Sep 1986, C. L. Hogue, 1♂ (UCR_ENT 00096052), 1♀ (UCR_ENT 00096066) (LACM). San Gabriel Mountains, foothills, 34.30000°N, 117.91667°W, 21 Oct 1965, R. H. Crandall, 1♀ (UCR_ENT 00096019) (LACM). San Gabriel Mts. Monte Cristo Campground, 34.33539°N, 118.15982°W, Jul 1978, Unknown, 1♂

(UCR_ENT 00061608) (UCR). Santa Monica Mountains Malibu Canyon, Cottontail Ranch, 34.10000°N, 118.71000°W, 06 Jul 1959, D.L. Gibo, 1♂ (UCR_ENT 00123185) (UCR). Santa Susana Mountains, Wickham Canyon, 34.37000°N, 118.60000°W, 04 Sep 1967, J. Lyon, 1♀ (UCR_ENT 00123186) (UCR). South Fork Campground, 34.39444°N, 117.81944°W, 06 Sep 1971, J. A. Honey, 3♂ (UCR_ENT 00095951-UCR_ENT 00095953) (LACM). South Side, San Gabriel Mountains, Foothills, 34.30000°N, 117.91667°W, 03 Oct 1976, R. H. Crandall, 1♀ (UCR_ENT 00096020) (LACM). Sylmar, 34.30778°N, 118.44833°W, 19 Oct 1968, Unknown, 1♂ (UCR_ENT 00066824) (UCR). Tanbark Flats, San Gabriel Mountains, 34.20350°N, 117.76105°W, 14 Jul 1956, A. Menke, Jr., 1♂ (UCR_ENT 00095973) (LACM); 18 Jul 1956, A. Menke, Jr., 1♂ (UCR_ENT 00095974) (LACM); 22 Jul 1950, W. A. McDonald, 1♂ (UCR_ENT 00095975) (LACM); 13 Jul 1952, D. Shepherd, 1♂ (UCR_ENT 00095976) (LACM); 13 Jul 1950, J. K. Windsor, 1♀ (UCR_ENT 00096008) (LACM); 25 Jun 1950, D. C. Blodget, 1♀ (UCR_ENT 00096009) (LACM). Tujunga Canyon, 34.25111°N, 118.33000°W, 13 Oct 1968, Unknown, 4♂ (UCR_ENT 00065827, UCR_ENT 00066819-UCR_ENT 00066821), 3♀ (UCR_ENT 00066815, UCR_ENT 00066817, UCR_ENT 00066818) (UCR); 13 Oct 1968, A. Strong, 1♀ (UCR_ENT 00066816) (UCR). **Monterey Co.:** 20 mi. E. Carmel valley, 36.47918°N, 121.37065°W, 13 Aug 1967, A. & A. Gillogly, 1♀ (UCR_ENT 00061605) (UCR). Cleveland Nat. Forest, Hatton Cyn., 36.44340°N, 121.73760°W, 27 Aug, G. A. Wallace, 1♂ (UCR_ENT 00066746) (UCR). Paraiso Hot Springs, 36.33102°N, 121.37648°W, 15 Jun 1954, Owen Bryant, 1♀ (UCR_ENT 00079332) (CAS). Paraiso Springs, 36.33139°N, 121.36778°W, 05 Aug 1939, Unknown, 1♀ (UCR_ENT 00079323) (CAS). **Napa Co.:** Howell Mountain, N side, 2 mi NNE of Angwin, 38.59584°N, 122.44169°W, 02 Jun 1986, H. B. Leech, 1♂ (UCR_ENT 00079305), 1♀ (UCR_ENT 00079306) (CAS). **Orange Co.:** 15 mi. NE San Juan cp. highway 74, 33.65543°N, 117.47711°W, 04 Jul 1978, C. Bellamy, 1♀ (UCR_ENT 00096025) (LACM). Cleveland National Forest, Harlan Canyon, 33.64417°N, 117.37917°W, 27 Aug 1964, G. E. Wallace, 1♂ (UCR_ENT 00061646) (UCR). Laguna Beach, 33.55000°N, 117.83330°W, 07 Aug 1936, Timberlake, 1♀ (UCR_ENT 00066351) (UCR). Laguna Canyon, 33.54225°N, 117.78477°W, Sep 1964, M. E. Irwin, 1♂ (UCR_ENT 00066875) (UCR). Ortega Highway, El Cariso Campground, 33.65643°N, 117.41124°W, 19 Oct 1944, A. L. Melander, 1♀ (UCR_ENT 00066386) (UCR). Silverado Canyon, 33.74611°N, 117.63611°W, 20 Oct 1974, A. Strawn, 1♂ (UCR_ENT 00061639) (UCR); 21 Oct 1967, Unknown, 1♂ (UCR_ENT 00066881), 1♀ (UCR_ENT 00066882) (UCR); 12 Jul 1978, Harris, 1♀ (UCR_ENT 00096017) (LACM). Silverado Canyon, 33.75641°N, 117.67755°W, 20 Oct 1974, Strawn, 4♂ (UCR_ENT 00066773-UCR_ENT 00066776), 3♀ (UCR_ENT 00066771-UCR_ENT 00066772, UCR_ENT 00067452) (UCR). Yorba Linda, 33.88646°N, 117.81167°W, 14 Aug 1920, Timberlake, 2♂ (UCR_ENT 00066357, UCR_ENT 00066358) (UCR). **Placer Co.:** Foresthill, 39.01666°N, 120.81666°W, 08 Sep 1979, E. L. Klee, 1♂ (UCR_ENT 00079263), 1♀ (UCR_ENT 00079317) (CAS). **Plumas Co.:** Portola, 39.81055°N, 120.46916°W, 28 Aug 1910, Unknown, 2♂ (UCR_ENT 00095967, UCR_ENT 00095968) (LACM). **Riverside Co.:** 12 mi E of Hemet, San Bernardino National Forest, 33.70871°N, 116.76110°W, 26 May 2009, C. Weirauch, D. Forero, G. Zhang, 1♂ (UCR_ENT 00071878) (UCR). Banning, 33.92737°N, 116.87370°W, 31 Jul 1929, C. C. Searl, 1♂ (UCR_ENT 00078796) (SDNH); 18 Jul 1929, C. C. Searl, 1;u (UCR_ENT 00078818) (SDNH); 13 Jul 1929, C. C. Searl, 1;u (UCR_ENT 00078819), 1♀ (UCR_ENT 00078850) (SDNH). Bautista Canyon, 33.69778°N, 116.85194°W, 07 Oct 1978, B. A. Hawkins, 2♂ (UCR_ENT 00066829, UCR_ENT 00066830), 1♀ (UCR_ENT 00066828) (UCR); 07 Oct 1978, E. Fisher, 1♂ (UCR_ENT 00066831) (UCR); 07 Oct 1978, G.A. Pak, 2♂ (UCR_ENT 00066833, UCR_ENT 00066834) (UCR); 14 Oct 1978, N. Nadel, 1♂ (UCR_ENT 00066832) (UCR); 10 Oct 1989, James Hazen, 1♂ (UCR_ENT 00066840) (UCR). Bautista Canyon, 33.70267°N, 116.86108°W, Oct 2016, C. Rosas, 1♂ (UCR_ENT 00127595) (UCR). Bautista Canyon NR. Dam, 33.67950°N, 116.93433°W, 9/27/1975, J. R. Hlavac, 1♂ (UCR_ENT 00092928), 1♀ (UCR_ENT 00092933) (UCR). Bautista Creek, T6S R7E Sec 21, 33.63481°N, 116.25936°W, 28 Oct 1982, L. Constantino, 1♀ (UCR_ENT 00066838) (UCR); 28 Apr 1989, L. Constantino, 1♂ (UCR_ENT 00066839) (UCR). Citrus Exp. Station, 33.96627°N, 117.33510°W, 27 Aug 1924, J. C. Chamberlin, 1♂ (UCR_ENT 00066847) (UCR). Cleveland National Forest, Harlan Canyon, 33.64417°N, 117.37917°W, 27 Aug 1964, Unknown, 1♀ (UCR_ENT 00065831) (UCR). Gavilan Hills, 33.78444°N, 117.36833°W, 06 Oct 1952, A. L. Melander, 3♂ (UCR_ENT 00066378-UCR_ENT 00066380), 2♀ (UCR_ENT 00066376, UCR_ENT 00066377) (UCR). Idyllwild, 33.74000°N, 116.71806°W, 27 Aug 1968, M. W. Stone, 1♂ (UCR_ENT 00066841) (UCR). Lake Hemet, T6S R3E Sec 16, 33.65196°N, 116.68013°W, 22 Jun 1983, R. D. Goeden and D. W. Ricker, 1♂ (UCR_ENT 00067438) (UCR). Meniffee Valley, hills on W end, 33.72833°N, 117.14556°W, 02 Oct 1982 - 08 Oct 1982, J. D. Pinto, 1♂ (UCR_ENT 00061720) (UCR); 26 Jun 1978, J. D. Pinto, 1♂ (UCR_ENT 00061721) (UCR). Miller Canyon Cp. San Bernardino Mts., 34.21797°N, 118.14675°W, 24 Jul 1941, W. F. Barr, 1♀ (UCR_ENT 00080084) (WFBM). Mission Canyon, 33.70278°N, 116.94022°W, 01 Oct 1932, Timberlake, 1♂ (UCR_ENT 00066366) (UCR). Morongo, 33.95283°N, 116.80783°W, 29 Sep 1944, Timberlake, 1♀ (UCR_ENT 00066340) (UCR). Mount San Jacinto, 33.81432°N, 116.67831°W, 28 May 1939, R. M. Bohart, 1♂ (UCR_ENT 00079340) (CAS), 1♂ (UCR_ENT 00095962) (LACM). Palm Springs, 33.83028°N, 116.54444°W, 30 Apr 1928, C. C. Searl, 1♂ (UCR_ENT 00078898) (SDNH). Pinyon Flat, 33.36120°N, 116.27210°W, 02 Jul 1958, C. Cushner, 1♀ (UCR_ENT 00079308) (CAS). Pinyon Flat, San Jacinto Mountains, 33.78389°N, 116.95778°W, 21 May 1940, W. L. Swisher, 1♀ (UCR_ENT 00096071) (LACM). Ribbonwood, San Jacinto Mountains, 33.57028°N, 116.49806°W, 02 Jul 1936, Timberlake, 1♀ (UCR_ENT 00066350) (UCR); 09 Sep 1951, Timberlake, 1♂ (UCR_ENT 0008767) (UCR). Riverside, 33.95556°N, 117.37222°W, 20 Jul 1947, R. A. Flock, 1♂ (UCR_ENT 00061647) (UCR); 06 Jul 1947, R. A. Flock, 1♂ (UCR_ENT 00061719) (UCR); 16 Jun 1925, Timberlake, 1♂ (UCR_ENT 00066747) (UCR); 20 Nov 1986, L. D. Anderson, 1♀ (UCR_ENT 00066842) (UCR). Riverside, 33.95333°N, 117.39528°W, 03 Jul 1961, B. Ewing, 1♀ (UCR_ENT 00066327) (UCR); 06 Aug 1941, Timberlake, 1♂ (UCR_ENT 00066333) (UCR); 20 Sep 1935, Timberlake, 1♂ (UCR_ENT 00066334) (UCR); 30 Aug 1935, Timberlake, 2♂ (UCR_ENT 00066335, UCR_ENT 00066336) (UCR); 23 May 1929, Timberlake, 1♂ (UCR_ENT 00066341) (UCR); 08 Sep 1933, Timberlake, 1♀ (UCR_ENT 00066342) (UCR); 22 Sep 1925, Timberlake, 1♀ (UCR_ENT 00066353) (UCR); 14 Nov 1924, Timberlake, 1♂ (UCR_ENT 00066354) (UCR); 12 Aug 1925, Timberlake, 1♂ (UCR_ENT 00066355) (UCR). San Jacinto Mountains, 33.74600°N, 116.71600°W, 26 Aug 1947, R. A. Flock, 1♂ (UCR_ENT 00061607) (UCR). San Timoteo Canyon, 33.97259°N, 117.10961°W, 19 Sep 1964, M. E. Irwin, 1♂ (UCR_ENT 00066845), 2♀ (UCR_ENT 00066843, UCR_ENT 00066844) (UCR). Santa Ana River, 33.81274°N, 117.86921°W, 14 Oct 1974, Unknown, 1♂ (UCR_ENT 00066846)

(UCR). Santa Margarita R. Ecological Reserve, 33.44834°N, 117.17204°W, 23 Sep 2000, G.R. Ballmer & G.F. Pratt, 1♂ (UCRC_ENT 00047539) (UCR). Santa Rosa Mountains Cactus Springs Trail, 33.57885°N, 116.45009°W, 17 Sep 1994, G. R. Ballmer, 1♂ (UCR_ENT 00066848) (UCR). St. Thomas Mt., 33.61972°N, 116.67944°W, 19 Oct 1985, M. Clement, 3♂ (UCR_ENT 00066835-UCR_ENT 00066837) (UCR). Thomas Mountain Road, 33.61972°N, 116.67944°W, 04 Sep 1999, G. R. Ballmer & D. C. Hawks, 4♂ (UCRC_ENT 00037963-UCR_ENT 00037966), 1♀ (UCRC_ENT 00037962) (UCR). Upper Deep Cyn. Horsethief Cr., 33.58318°N, 116.42139°W, 02 Jun 1965, E. I. Schlinger, 1♂ (UCRC_ENT 00008767) (UCR). Whitewater Canyon, 33.98910°N, 116.65570°W, 11 Nov 1944, A. L. Melander, 1♀ (UCR_ENT 00066384) (UCR). Winchester, 33.70694°N, 117.08361°W, 09 Aug 1975, J. Johnson, 1♂ (UCR_ENT 00078890) (SDNH). **San Benito Co.:** 1.6 mi from Idria, Clear cr. road, 36.41110°N, 120.67856°W, 21 Jul 1963, H. B. Leech, 1♂ (UCR_ENT 00079266), 1♀ (UCR_ENT 00079326) (CAS). 10 mi SE of Paicines, 36.65460°N, 121.14800°W, 02 Sep 2017, P. Masonick & C. Dodge, 1♂ (UCR_ENT 00127596) (UCR). **San Bernardino Co.:** 12 mi S of Victorville, 34.39622°N, 117.40472°W, 14 Sep 1935, Timberlake, 1♀ (UCR_ENT 00066748) (UCR). Banner Grade Banner Store, 33.06893°N, 116.54612°W, 10 Oct 1980, Faulkner and Brown, 1♂ (UCR_ENT 00078897) (SDNH). Barton Flat, So Fork Camp, 34.16965°N, 116.82712°W, 04 Sep 1944, A. L. Melander, 1♀ (UCR_ENT 00066385) (UCR). Barton Flats, 34.17251°N, 116.86308°W, 03 Sep 1948, Garth & Adams, 1♂ (UCR_ENT 00095964) (LACM). Big Bear Lake, 34.14975°N, 117.45377°W, 09 Sep 2006, C. Weirauch, 1♂ (AMNH_PBI 00218825) (UCR). Cajon Canyon, 2 mi S Cajon Junction, 34.28265°N, 117.47389°W, 10/12/1975, J. R. Hlavac, 1♂ (UCR_ENT 00092927), 1♀ (UCR_ENT 00092932) (UCR). Cajon Summit, Summit Valley, 34.34944°N, 117.44556°W, 26 Jul 1978, J. LaSalle, 1♂ (UCR_ENT 00066809), 2♀ (UCRC_ENT 00066814, UCR_ENT 00066814) (UCR). City Creek Road (Hwy 330): pullout above 5000' sign, 34.20470°N, 117.15170°W, 29 Aug 2014, P. Masonick, S. Frankenberg, A. Michael, 3♀ (UCR_ENT 00104981-UCR_ENT 00104983) (UCR). Deer Canyon, 34.17201°N, 117.57510°W, 31 Aug 2014, P. Masonick, 7♂ (UCR_ENT 00104994-UCR_ENT 00105000), 1♀ (UCR_ENT 00105001) (UCR). Forest Falls, 34.08955°N, 116.91991°W, 04 Oct 1980, D.C. Hawks, 6♂ (UCR_ENT 00066750-UCR_ENT 00066755), 6♀ (UCR_ENT 00066756-UCR_ENT 00066761) (UCR). Forest Falls, 34.08890°N, 116.93240°W, 29 Aug 2014, P. Masonick, S. Frankenberg, A. Michael, 1♂ (UCR_ENT 00104980) (UCR). Hwy 138 past Mormon Rocks at Stone Basin Road, 34.35564°N, 117.53017°W, 22 Aug 2014, C. Weirauch, A. Knyshev, P. Masonick, 1♂ (UCR_ENT 00104932) (UCR). Hwy 2 (Angeles Crest Hwy) at Desert Front Road, 34.37667°N, 117.60831°W, 22 Aug 2014, C. Weirauch, A. Knyshev, P. Masonick, 1♀ (UCR_ENT 00104934) (UCR); 26 Aug 2017, P. Masonick, 1♀ (UCR_ENT 00127439) (UCR). Hwy 2, at Angeles National Forest sign, 34.38314°N, 117.59456°W, 22 Aug 2014, C. Weirauch, A. Knyshev, P. Masonick, 1♂ (UCR_ENT 00104933) (UCR). Hwy 38: large pullout west of Hwy 38 / Valley of the Falls Drive junction, 34.09670°N, 116.96510°W, 29 Aug 2014, P. Masonick, S. Frankenberg, A. Michael, 9♂ (UCR_ENT 00104957-UCR_ENT 00104958, UCR_ENT 00104961, UCR_ENT 00104963, UCR_ENT 00104966-UCR_ENT 00104969, UCR_ENT 00104971), 9♀ (UCR_ENT 00104951-UCR_ENT 00104952, UCR_ENT 00104959-UCR_ENT 00104960, UCR_ENT 00104962, UCR_ENT 00104964-UCR_ENT 00104965, UCR_ENT 00104970, UCR_ENT 00104972) (UCR). Lake Arrowhead, 34.14996°N, 117.45383°W, 10/12/1974, A. Sanders, 1♂ (UCR_ENT 00092929) (UCR). Lone Pine Canyon Road, just after 138 turnoff, 34.31331°N, 117.49697°W, 22 Aug 2014, C. Weirauch, A. Knyshev, P. Masonick, 14♂ (UCR_ENT 00104927-UCR_ENT 00104931, UCR_ENT 00104985-UCR_ENT 00104992, UCR_ENT 00105002), 4♀ (UCR_ENT 00104926, UCR_ENT 00104953, UCR_ENT 00104993, UCR_ENT 00105003) (UCR). Mill Creek TIS, R1W, S8, 34.09879°N, 117.00810°W, 26 Sep 1978, Unknown, 1♀ (UCR_ENT 00066854) (UCR). Mill Creek, San Bernardino Mountains, 34.08721°N, 117.11396°W, 07 Oct 1995, M. Gates, 1♂ (UCRC_ENT 00039747) (UCR); 14 Aug 1945, Timberlake, 1♀ (UCR_ENT 00066328) (UCR); 01 Oct 1958, Timberlake, 1♂ (UCR_ENT 00066329) (UCR). Mount San Antonio, 34.28889°N, 117.64574°W, 21 Aug 1920, Timberlake, 1♂ (UCR_ENT 00066359) (UCR). Mountain Home, 34.12057°N, 116.99669°W, 21 Sep 1944, A. L. Melander, 3♂ (UCR_ENT 00066373, UCR_ENT 00066892, UCR_ENT 00066893) (UCR); 24 Sep 1944, A. L. Melander, 2♂ (UCR_ENT 00066374, UCR_ENT 00066375) (UCR). Mountain Home Creek, 34.11242°N, 116.98773°W, 24 Aug 1944, Timberlake, 1♀ (UCR_ENT 00066363) (UCR); 07 Sep 1949, Timberlake, 1♂ (UCR_ENT 00066364) (UCR). Mt Baldy Road, 1 mile NE of Mt Baldy Village, 34.24696°N, 117.64237°W, 14 Sep 2014, P. Masonick, 1♂ (UCR_ENT 00113575), 1♀ (UCR_ENT 00113576) (UCR). Mt. Home Canyon, 37.83159°N, 122.18774°W, 04 Apr 1952, A. L. Melander, 2♂ (UCR_ENT 00066887, UCR_ENT 00066888) (UCR); 07 Sep 1947, A. L. Melander, 2♂ (UCR_ENT 00066889, UCR_ENT 00066890) (UCR); 22 Aug 1949, A. L. Melander, 1♂ (UCR_ENT 00066891) (UCR). Providence Mts. Wild Horse Cyn. 5 mi. NW. Hole-in-Wall Rec., 37.00819°N, 118.85166°W, 14 Oct 1982, D. Hawks, J. Pinto, R. Velten, 2♂ (UCRC_ENT 00066804, UCR_ENT 00066805) (UCR). Rattlesnake Mountain, 34.35556°N, 117.08417°W, no date provided, unable to read name on label, 1♂ (UCR_ENT 00092926) (UCR). Riverside County, Box Springs Mountain Park, 33.98103°N, 117.28990°W, 01 Jul 2016, C. Weirauch, P.Masonick, M. Hernandez, 2 Nymph (UCR_ENT 00108716, UCR_ENT 00115003), 6♂ (UCR_ENT 00123471-UCR_ENT 00123472), 3♀ (UCR_ENT 00123473-UCR_ENT 00123473) (UCR). Rock Camp N. of Lake Arrowhead, 34.34498°N, 117.17276°W, 22 Oct 1978, D. Hawks, 6♂ (UCRC_ENT 00066793-UCRC_ENT 00066794, UCR_ENT 00066800-UCR_ENT 00066801), 2♀ (UCRC_ENT 00066792, UCR_ENT 00066792) (UCR). Rock Corral, 34.32333°N, 116.56000°W, 09 Oct 1980, D. C. Hawks, 5♂ (UCRC_ENT 00066795-UCRC_ENT 00066799) (UCR). San Bernardino County, 34.08861°N, 117.27972°W, 22 Oct 1978, D. Hawks, 1♂ (UCRC_ENT 00066808) (UCR). San Bernardino Mts., 34.12500°N, 116.87500°W, 26 Sep 1949, A. L. Melander, 3♂ (UCRC_ENT 00066806-UCR_ENT 00066807) (UCR). San Bernardino Mts., Forest Rd. 3NO3 at Arrastre Cr., 34.27500°N, 116.74611°W, 26 Jun 2004, G. R. Ballmer, 1♂ (AMNH_PBI 00098559) (UCR). San Bernardino National Forest, Lytle Creek Road, 34.26668°N, 117.51085°W, 26 Jun 2016, P. Masonick & C. Dodge, 12 Nymph (UCR_ENT 00123465-UCR_ENT 00123466), 31♂ (UCR_ENT 00114844, UCR_ENT 00123464-UCR_ENT 00123464, UCR_ENT 00123467-UCR_ENT 00123470), 3♀ (UCR_ENT 00108593, UCR_ENT 00123462, UCR_ENT 00123463) (UCR); 08 Jul 2016, C. Weirauch, P. Masonick, M. Hernandez, 1 Nymph (UCR_ENT 00124800), 273♂ (UCR_ENT 00123475, UCR_ENT 00124639-UCR_ENT 00124641, UCR_ENT 00124644, UCR_ENT 00124649, UCR_ENT 00124654, UCR_ENT 00124656, UCR_ENT 00124659-UCR_ENT 00124661, UCR_ENT 00124667-UCR_ENT 00124669, UCR_ENT 00124671, UCR_ENT 00124674-UCR_ENT 00124676, UCR_ENT 00124678,

UCR_ENT 00124680-UCR_ENT 00124682, UCR_ENT 00124685-UCR_ENT 00124687, UCR_ENT 00124691, UCR_ENT 00124693-UCR_ENT 00124697, UCR_ENT 00124700-UCR_ENT 00124701, UCR_ENT 00124703-UCR_ENT 00124704, UCR_ENT 00124706-UCR_ENT 00124708, UCR_ENT 00124714-UCR_ENT 00124716, UCR_ENT 00124718, UCR_ENT 00124720-UCR_ENT 00124721, UCR_ENT 00124723-UCR_ENT 00124725, UCR_ENT 00124728, UCR_ENT 00124730-UCR_ENT 00124734, UCR_ENT 00124736-UCR_ENT 00124737, UCR_ENT 00124740-UCR_ENT 00124741, UCR_ENT 00124743-UCR_ENT 00124744, UCR_ENT 00124747, UCR_ENT 00124749, UCR_ENT 00124751, UCR_ENT 00124757, UCR_ENT 00124761, UCR_ENT 00124764-UCR_ENT 00124765, UCR_ENT 00124767-UCR_ENT 00124769, UCR_ENT 00124771, UCR_ENT 00124774, UCR_ENT 00124779-UCR_ENT 00124780, UCR_ENT 00124783-UCR_ENT 00124785, UCR_ENT 00124787, UCR_ENT 00124789, UCR_ENT 00124793, UCR_ENT 00124795, UCR_ENT 00124797, UCR_ENT 00124804-UCR_ENT 00124805, UCR_ENT 00124808-UCR_ENT 00124809, UCR_ENT 00124814-UCR_ENT 00124816, UCR_ENT 00124819-UCR_ENT 00124822, UCR_ENT 00124828, UCR_ENT 00124830-UCR_ENT 00124832, UCR_ENT 00124835, UCR_ENT 00124837-UCR_ENT 00124841, UCR_ENT 00124843-UCR_ENT 00124845), 284♀ (UCR_ENT 00124642-UCR_ENT 00124643, UCR_ENT 00124645-UCR_ENT 00124648, UCR_ENT 00124650-UCR_ENT 00124653, UCR_ENT 00124655, UCR_ENT 00124657-UCR_ENT 00124658, UCR_ENT 00124662-UCR_ENT 00124666, UCR_ENT 00124670, UCR_ENT 00124672-UCR_ENT 00124673, UCR_ENT 00124677, UCR_ENT 00124679, UCR_ENT 00124683-UCR_ENT 00124684, UCR_ENT 00124688-UCR_ENT 00124690, UCR_ENT 00124692, UCR_ENT 00124698-UCR_ENT 00124699, UCR_ENT 00124702, UCR_ENT 00124705, UCR_ENT 00124709-UCR_ENT 00124713, UCR_ENT 00124717, UCR_ENT 00124719, UCR_ENT 00124722, UCR_ENT 00124726-UCR_ENT 00124727, UCR_ENT 00124729, UCR_ENT 00124735, UCR_ENT 00124738-UCR_ENT 00124739, UCR_ENT 00124742, UCR_ENT 00124745-UCR_ENT 00124746, UCR_ENT 00124748, UCR_ENT 00124750, UCR_ENT 00124752-UCR_ENT 00124756, UCR_ENT 00124758-UCR_ENT 00124760, UCR_ENT 00124762-UCR_ENT 00124763, UCR_ENT 00124766, UCR_ENT 00124770, UCR_ENT 00124772-UCR_ENT 00124773, UCR_ENT 00124775-UCR_ENT 00124778, UCR_ENT 00124781-UCR_ENT 00124782, UCR_ENT 00124786, UCR_ENT 00124788, UCR_ENT 00124790-UCR_ENT 00124792, UCR_ENT 00124794, UCR_ENT 00124796, UCR_ENT 00124798-UCR_ENT 00124799, UCR_ENT 00124801-UCR_ENT 00124803, UCR_ENT 00124806-UCR_ENT 00124807, UCR_ENT 00124810-UCR_ENT 00124813, UCR_ENT 00124817-UCR_ENT 00124818, UCR_ENT 00124823-UCR_ENT 00124827, UCR_ENT 00124829, UCR_ENT 00124833-UCR_ENT 00124834, UCR_ENT 00124836, UCR_ENT 00124842) (UCR); 26 Jul 2016, P. Masonick, M. Hernandez, 110♂ (UCR_ENT 00125601-UCR_ENT 00125609, UCR_ENT 00125619, UCR_ENT 00125621, UCR_ENT 00125623, UCR_ENT 00125627-UCR_ENT 00125632), 101♀ (UCR_ENT 00125610-UCR_ENT 00125618, UCR_ENT 00125620, UCR_ENT 00125622, UCR_ENT 00125624-UCR_ENT 00125626, UCR_ENT 00125633-UCR_ENT 00125635) (UCR). San Bernardino National Forest, nr. Lytle Creek Ranger Station, 34.23382°N, 117.47948°W, 26 Jun 2016, P. Masonick & C. Dodge, 1♀ (UCR_ENT 00123457) (UCR); 26 Jul 2016, P. Masonick, M. Hernandez, 5♂ (UCR_ENT 00125636-UCR_ENT 00125637, UCR_ENT 00125639), 1♀ (UCR_ENT 00125638) (UCR). San Bernardino National Forest, nr. Lytle Creek Shooting Range, 34.28640°N, 117.54380°W, 26 Jun 2016, P. Masonick & C. Dodge, 1♂ (UCR_ENT 00108062) (UCR). Santa Ana River, 34.09801°N, 117.21807°W, 02 Sep 1948, Garth & Adams, 1♀ (UCR_ENT 00096012) (LACM). Valley of the Falls Drive: large pullout east of the Hwy 38 / Valley of the Falls Drive junction, 34.09490°N, 116.94720°W, 29 Aug 2014, P. Masonick, S. Frankenberg, A. Michael, 2♂ (UCR_ENT 00104977, UCR_ENT 00104978), 4♀ (UCR_ENT 00104973-UCR_ENT 00104976) (UCR). Waterman Canyon, San Bernardino Mountains, 34.17833°N, 117.26917°W, 19 Aug 1947, Timberlake, 2♂ (UCR_ENT 00066343, UCR_ENT 00066344), 2♀ (UCR_ENT 00066345, UCR_ENT 00066346) (UCR). Wrightwood, 34.36167°N, 117.63017°W, 09 Aug 1978, J. LaSalle, 2♀ (UCR_ENT 00066813, UCR_ENT 00066813) (UCR). **San Diego Co.:** 0.3 mi S Boulder Oaks Campground (Old Hwy 80), 32.72601°N, 116.47921°W, 28 Jun 1989, R. J. Watts, 1♂ (UCR_ENT 00078810), 2♀ (UCR_ENT 00078844, UCR_ENT 00078851) (SDNH). 2.2 mi. SE Hauser Creek, Public Camp near Campo, 32.65020°N, 116.53957°W, 24 Jul 1965, R. E. Somerby, 1♀ (UCR_ENT 00066869) (UCR). 3 mi S Oak Grove, 33.34075°N, 116.78833°W, 10/28/1978, J. R. Hlavac, 1♀ (UCR_ENT 00092931) (UCR). 3.2 mi. E. Julian Hwy. 78, 33.07860°N, 116.54569°W, 07 Aug 1965, S. & S. Frommer, 1;u (UCR_ENT 00065828), 3♂ (UCR_ENT 00066866-UCR_ENT 00066868), 1♀ (UCR_ENT 00066865) (UCR). 5 mi. W Oak Grove, 33.38497°N, 116.87521°W, 05 Jul 1959, E. L. Westcott, 1♀ (UCR_ENT 00096024) (LACM). 5.2 mi NW of Ramona, Hwy 78, 33.08521°N, 116.91145°W, 07 Aug 1965, S. & S. Frommer, S. Larisch, 1♂ (UCR_ENT 00066870) (UCR). 5.5 mi. W. Scissors Crossing, 33.09635°N, 116.56970°W, 04 Oct 1974, Unknown, 1♂ (UCR_ENT 00061644) (UCR). 6 mi. S Warner Springs, 33.04867°N, 117.04194°W, 10 Oct 1971, J. A. Honey, 1♂ (UCR_ENT 00095956) (LACM). 9 mi S of Warner Springs, 33.04900°N, 117.04200°W, 04 Jul 1956, J. I. Stage, 1♂ (UCR_ENT 00079264) (CAS). Anza-Borrego Desert, 33.22889°N, 116.26028°W, 22 Sep 1977, D. K. F., 1♂ (UCR_ENT 00078808) (SDNH). Anza-Borrego Desert State Park, Fish Creek, 33.00005°N, 116.21337°W, 22 Oct 1983, Robert B. Parks, 1♂ (UCR_ENT 00078814) (SDNH). Campo, 32.60645°N, 116.46890°W, 20 Oct 1937, W.P. Medlar, 1♀ (UCR_ENT 00078847) (SDNH). Cuyamaca, 32.98472°N, 116.57000°W, 10 Oct 1940, G. F. Harbison, 2♂ (UCR_ENT 00078806, UCR_ENT 00078807), 1♀ (UCR_ENT 00078842) (SDNH). Descanso Junction and Japatul Road, 32.84111°N, 116.61194°W, 16 Aug 1946, C. Baumann, 3♂ (UCR_ENT 00061708-UCR_ENT 00061710), 1♀ (UCR_ENT 00061711) (UCR); 16 Aug 1946, Timberlake, 1♂ (UCR_ENT 00066349) (UCR). Descanso-Alpine site, 32.85030°N, 116.67738°W, 1970-72 (54347), A. R. Moldenke, 1♂ (UCR_ENT 00098983) (CAS). Descanso-Laguna Jct, 32.84111°N, 116.61194°W, 21 Oct 1937, W.P. Medlar, 1;u (UCR_ENT 00078820), 1♂ (UCR_ENT 00078809), 1♀ (UCR_ENT 00078834) (SDNH). Desert Springs [=Piñon Hills], 34.43978°N, 117.64001°W, 07 Jul 1954, Timberlake, 1♀ (UCR_ENT 00066365) (UCR). Hot Springs Mountain, 2 mi E of Gate, 33.04970°N, 117.04233°W, 07 Jul 1978, Faulkner, Brown, 4♀ (UCR_ENT 00078823-UCR_ENT 00078826) (SDNH). Indian Hill Grade, Carrista Creek, 33.20514°N, 116.71795°W, 21 Jul 1977, D. K. F., 1♂ (UCR_ENT 00078799) (SDNH); 17 Sep 1977, D. K. F., 5♂ (UCR_ENT 00078800-UCR_ENT 00078801, UCR_ENT 00078852-UCR_ENT 00078854), 3♀ (UCR_ENT 00078839-UCR_ENT 00078841) (SDNH). Jacumba, 32.61750°N, 116.18889°W, 19 Jun 1927, C. C. Searl, 1♂ (UCR_ENT 00078856) (SDNH). Japatul, 32.79201°N, 116.68539°W, 08 Jun 1976, Unknown, 3♂ (UCR_ENT 00078815-UCR_

ENT 00078817), 3♀ (UCR_ENT 00078827-UCR_ENT 00078829) (SDNH). June Wash, 32.94200°N, 116.25579°W, 05 Oct 1984, J. C. Hall, 2♂ (UCR_ENT 00066861, UCR_ENT 00066862), 2♀ (UCR_ENT 00066863, UCR_ENT 00066864) (UCR). La Mesa, 32.76778°N, 117.02222°W, 31 Jul 1958, P. Rude, 1♂ (UCR_ENT 00066381) (UCR); 28 Jun 1958, P. Rude, 1♂ (UCR_ENT 00066382) (UCR). Laguna Mountains, 32.80833°N, 116.44833°W, 08 Jul 1920 - 15 Jul 1920, Unknown, 1♀ (UCR_ENT 00078865) (SDNH). Laguna Mts, Cuyamaca, Middle Peak, 32.98028°N, 116.59917°W, 18 Jul 1968, Faulkner, Brown, 1♂ (UCR_ENT 00078804) (SDNH). Laguna Mts. Julian Dump, 33.07861°N, 116.60111°W, 01 Oct 1978, J.W.B. & D.K.F., 2♂ (UCR_ENT 00078802, UCR_ENT 00078803) (SDNH); 01 Oct 1978, D. K. F., 1♀ (UCR_ENT 00078846) (SDNH). Lakeside, Eucalyptus Hills, 32.87972°N, 116.94583°W, 19 Aug 1977, M. Cox, 1♀ (UCR_ENT 00078845) (SDNH). Mission Dam, 32.84199°N, 117.04058°W, 09 Apr 1977, S. C. Johnson, 1♂ (UCR_ENT 00066859), 1♀ (UCR_ENT 00066860) (UCR). Mission Valley, 32.76028°N, 117.21194°W, 09 Sep 1928, C. C. Searl, 1♂ (UCR_ENT 00078812), 1♀ (UCR_ENT 00078833) (SDNH). Oak Grove, 33.38301°N, 116.79045°W, 10 Sep 1975, J. D. Pinto, 1♂ (UCR_ENT 00066326) (UCR). Otay Mesa, Jamul Creek, 32.63192°N, 116.88836°W, 07 Oct 1978, D. K. F., 1♀ (UCR_ENT 00078835) (SDNH). Otay Mountain, 32.59472°N, 117.06361°W, 05 Jun 1977, D. K. Faulkner, 1;u (UCR_ENT 00078822) (SDNH). Palm Canyon, Borrego Valley, 33.28051°N, 116.43334°W, 26 Apr 1953, A. Fukushima, 5♂ (UCR_ENT 00096043-UCR_ENT 00096047), 3♀ (UCR_ENT 00096068-UCR_ENT 00096070) (LACM). Palomar Mountain, 33.35577°N, 116.86145°W, 19 Aug 1979, J.W. Brown, 1♀ (UCR_ENT 00078843) (SDNH). Pine Valley, 32.83583°N, 116.53361°W, 22 Aug 1927, F. W. Kelsey, 10♂ (UCR_ENT 00078798, UCR_ENT 00078876-UCR_ENT 00078884), 4♀ (UCR_ENT 00078872-UCR_ENT 00078875) (SDNH); 04 Sep 1927, C. C. Searl, 1♂ (UCR_ENT 00078857), 5♀ (UCR_ENT 00078868-UCR_ENT 00078871, UCR_ENT 00078902) (SDNH). Pine Valley, Sunshine Hwy, 32.83583°N, 116.53361°W, 16 Sep 1976, McElfresh, 5♂ (UCR_ENT 00078885-UCR_ENT 00078889), 3♀ (UCR_ENT 00078901, UCR_ENT 00078903, UCR_ENT 00078904) (SDNH). Rincon, 33.17170°N, 116.57300°W, 03 Jun 1928, C. C. Searl, 1♀ (UCR_ENT 00078867) (SDNH). San Diego, 32.71528°N, 117.15639°W, 25 Jul 1925, Timberlake, 1♂ (UCR_ENT 00066356) (UCR); 18 Aug 1921, Unknown, 1;u (UCR_ENT 00078821), 1♂ (UCR_ENT 00078861) (SDNH); 8-4-1931, Unknown, 1♀ (UCR_ENT 00078830) (SDNH); 17 Jul 1920, W. S. Wright, 2♀ (UCR_ENT 00078831, UCR_ENT 00078905) (SDNH); 31 Aug 1921, Unknown, 1♂ (UCR_ENT 00078891), 2♀ (UCR_ENT 00078836, UCR_ENT 00078863) (SDNH); 8-7-31, Unknown, 2♀ (UCR_ENT 00078849, UCR_ENT 00078864) (SDNH); 8-4-31, Unknown, 1♂ (UCR_ENT 00078858) (SDNH); 25 Aug 1921, Unknown, 1♂ (UCR_ENT 00078859) (SDNH); 09 Sep 1921, Unknown, 1♂ (UCR_ENT 00078860) (SDNH). San Diego County, unspecified locality, 32.73422°N, 117.15070°W, no date provided, Unknown, 1♀ (UCR_ENT 00078832) (SDNH). San Diego, Chollas Valley, 32.68778°N, 117.13500°W, 03 Sep 1973, J. P. Donahue, 1♂ (UCR_ENT 00095969) (LACM). Santee, 32.83833°N, 116.97306°W, 12 Oct 1957, P. Rude, 1♀ (UCR_ENT 00061603) (UCR). Scissors Crossing, Sentenac Cyn., 33.12944°N, 116.43111°W, 14 Oct 1979, D. C. Hawks, 1♀ (UCR_ENT 00066871) (UCR). Sentenac Canyon, 33.12910°N, 116.43122°W, 11 Nov 1976, Unknown, 1♀ (UCR_ENT 00078866) (SDNH). Teacate Peak, 32.57944°N, 116.68806°W, 30 Jun 1984, Faulkner, Brown, 1♀ (UCR_ENT 00078848) (SDNH). Warner's, 33.27632°N, 116.64828°W, July, 1919, George H. Field, 1♂ (UCR_ENT 00078813) (SDNH); Jun 1922, George H. Field, 1♀ (UCR_ENT 00078837) (SDNH). near Jacumba, 32.61700°N, 116.18800°W, 13 May 1978, DKF, 1♂ (UCR_ENT 00078899) (SDNH). **San Luis Obispo Co.:** Bee Canyon, 35.15750°N, 120.55778°W, 10 Nov 1970, Unknown, 1♀ (UCR_ENT 00066876) (UCR). San Luis Rey Campground, Lake Henshaw, 33.24167°N, 116.76222°W, 18 Oct 1968, Unknown, 2♂ (UCR_ENT 00066877, UCR_ENT 00066878) (UCR). **Santa Barbara Co.:** El Jaro Creek, 34.58414°N, 120.40797°W, 24 Jul 1972, Unknown, 1♀ (UCR_ENT 00066853) (UCR). Los Padres Nat. For., 34.40000°N, 119.45040°W, 29 Jul 1958, Unknown, 1♀ (UCR_ENT 00079307) (CAS). Orcutt, 34.86528°N, 120.43500°W, 16 Jun 1962, Unknown, 2♂ (UCR_ENT 00066849, UCR_ENT 00066850) (UCR); 17 Jun 1962, Unknown, 1♂ (UCR_ENT 00066852), 1♀ (UCR_ENT 00066851) (UCR). Santa Barbara, 34.42083°N, 119.69722°W, 12 Sep 1950, Timberlake, 1♂ (UCR_ENT 00061706) (UCR). Santa Ynez Mountains, 34.29400°N, 119.42450°W, 24 Jun 1959, J. L. Bath, 1;u (UCR_ENT 00066337), 3♀ (UCR_ENT 00065832-UCR_ENT 00065834) (UCR). Santa Ynez Mountains, W. Camino Cielo Rd., 34.52720°N, 119.98047°W, 18 Jul 2015, A.J. Mayor & M. Gimmel, 6♂ (UCR_ENT 00123251, UCR_ENT 00123253-UCR_ENT 00123257), 3♀ (UCR_ENT 00123247-UCR_ENT 00123249) (UCR). **Santa Clara Co.:** 15 mi. E. Lick, Mt. Hamilton, 37.28691°N, 121.57133°W, 30 Aug 1967, A. & A. Gillogly, 1♂ (UCR_ENT 00061640) (UCR). unknown, 37.36000°N, 121.97000°W, no date provided, Harkins, 1♂ (UCR_ENT 00079262) (CAS). **Ventura Co.:** Hwy 33, 24 mi. N. Ojai, 34.69581°N, 119.36553°W, 24 Aug 1973, Unknown, 1♂ (UCR_ENT 00061716), 1♀ (UCR_ENT 00061715) (UCR). Sespe Gorge, 34.57889°N, 119.25722°W, 25 Sep 1971, J. A. Honey, 3♂ (UCR_ENT 00095948-UCR_ENT 00095950), 1♀ (UCR_ENT 00096021) (LACM). Ventu Park near Thousand Oaks in open space south of Lynn Rd., 34.17333°N, 118.89167°W, 25 May 1996, Jere Schweikert, 3♂ (UCR_ENT 00079281-UCR_ENT 00079283), 2♀ (UCR_ENT 00079329, UCR_ENT 00079330) (CAS).

***Phymata pennsylvanica* Handlirsch, 1897**

Total records reported: 123, Total Adult Male: 69, Total Adult Female: 54

Specimens Examined: **CANADA: Ontario: Chatham-Kent Census Division Co.:** Wheatley, 42.00000°N, 82.00000°W, 14 Aug 2011 - 16 Aug 2011, David Punzalan, 3♂ (UCR_ENT 00092939-UCR_ENT 00092941), 2♀ (UCR_ENT 00092942, UCR_ENT 00092943) (UCR). **USA: Connecticut: Fairfield Co.:** unknown, 41.14111°N, 73.26410°W, 30 Aug 1941, A. L. Melander, 1♂ (UCR_ENT 00065816) (UCR). **Litchfield Co.:** Candlewood Lake, 41.50163°N, 73.45246°W, 30 Aug 1941, A. L. Melander, 1♀ (UCR_ENT 00067527) (UCR). **Tolland Co.:** Storrs (in Mansfield Twp.), 41.80833°N, 72.25000°W, 8/30/1973, H. A. Hesperheide, 1♂ (UCR_ENT 00092936) (UCR). **Florida: Flagler Co.:** Palm Coast, 23 Folsom Ln., 29.57200°N, 81.21300°W, 02 Oct 2016, J. Heraty, 1♂ (UCR_ENT 00127494) (UCR). **Illinois: Champaign Co.:** St. Joseph, 40.11250°N, 88.03750°W, 27 Aug 1904, F. Knab, 3♂ (UCR_ENT 00046194-UCR_ENT 00046196) (CAS). **Kane Co.:** Elgin: 38W668 Ridgewood Ln., 42.06320°N, 88.37372°W, Summer 2016, J. Masonick, 1♂ (UCR_ENT 00127512) (UCR). **Lee Co.:** Nachusa Grasslands, 41.89440°N, 89.37232°W, 29 Jul 2017, P. Masonick & C.

Dodge, 1♂ (UCR_ENT 00127510) (UCR). **Mason Co.:** Mason State Forest, 40.41138°N, 89.86611°W, 25 Jul 1964, John D. Pinto, 1♂ (UCR_ENT 00065839) (UCR). **Indiana: Kosciusko Co.:** Winona Lake, 41.22722°N, 85.82194°W, no date provided, Mrs. L. Landover, 2♀ (UCR_ENT 00025179, UCR_ENT 00025180) (SDNH). **Lawrence Co.:** Williams, 38.80450°N, 86.64722°W, 01 Sep 1985, R.S. Miller, 1♂ (UCR_ENT 00120255) (MTEC). **Tippecanoe Co.:** Lafayette, 40.41667°N, 86.87528°W, no date provided, R. W. Thomas, 1♂ (UCR_ENT 00079535) (WFBM). **Kentucky: Fayette Co.:** Lexington, off Brier East Rd., 38.01524°N, 84.37661°W, 29 Aug 2009, E. Chapman & J.M. Leavengood, Jr., 4♂ (UCR_ENT 00123155-UCR_ENT 00123156, UCR_ENT 00123158, UCR_ENT 00123159), 2♀ (UCR_ENT 00123154, UCR_ENT 00123157) (UCR); 22 Aug 2009, E. Chapman & J.M. Leavengood, Jr., 3♂ (UCR_ENT 00123160-UCR_ENT 00123162), 1♀ (UCR_ENT 00123163) (UCR). Raven Run Nature Sanctuary, 37.88737°N, 84.39764°W, 31 Jul 2009, J.M. Leavengood, Jr., 5♂ (UCR_ENT 00123152-UCR_ENT 00123153, UCR_ENT 00123164-UCR_ENT 00123166) (UCR). **Massachusetts: Barnstable Co.:** Provincetown, 42.05833°N, 70.17861°W, 01 Sep 1914, C. W. Johnson, 1♂ (UCR_ENT 00046189), 1♀ (UCR_ENT 00046217) (CAS). Woods Hole, 41.52650°N, 70.67309°W, 23 Aug 1914, W. M. Mann, 1♂ (UCR_ENT 00046191), 3♀ (UCR_ENT 00046212-UCR_ENT 00046214) (CAS). **Bristol Co.:** Easton, 42.02444°N, 71.12910°W, no date provided, Unknown, 1♀ (UCR_ENT 00079412) (CAS). **Essex Co.:** Saugus, 42.46472°N, 71.01056°W, 06 Sep 1914, F. W. Dodge, 1♀ (UCR_ENT 00079408) (CAS). **Hampshire Co.:** Northampton, 42.32500°N, 72.64167°W, 08 Sep 1944, H. M. Parshley, 1♀ (UCR_ENT 00079413) (CAS). **Middlesex Co.:** Framingham, 42.27917°N, 71.41667°W, 10 Aug 1929, Unknown, 1♂ (UCR_ENT 00025178), 1♀ (UCR_ENT 00025181) (SDNH). Melrose Highlands, 42.45833°N, 71.06667°W, 22 Aug 1909, Timberlake, 1♀ (UCR_ENT 00065817) (UCR); 25 Aug 1909, Timberlake, 1♀ (UCR_ENT 00065818) (UCR). **Plymouth Co.:** Manomet, 41.91861°N, 70.56611°W, 05 Aug 1912, W.S. Brooks, 1♂ (UCR_ENT 00046188) (CAS). **Michigan: Allegan Co.:** Unknown, 42.52917°N, 85.85528°W, 1 August 1974, J. Johnson, 2♀ (UCR_ENT 00080107, UCR_ENT 00080108) (WFBM). **Jackson Co.:** Jackson, 42.24417°N, 84.40722°W, 16 Aug 1954, P. S. Bartholomew, 1♀ (UCR_ENT 00079418) (CAS). **Kalamazoo Co.:** Atwater Pond, 42.23277°N, 85.65700°W, 20 Sep 1998, J. B. Johnson, 1♀ (UCR_ENT 00079538) (WFBM). **St. Joseph Co.:** 5 mi W Constantine, 41.83906°N, 85.75959°W, 20 Jul 1980, S. McElfresh, 1♂ (UCR_ENT 00025177) (SDNH). **Missouri: Taney Co.:** Branson, 36.64361°N, 93.21833°W, 13 Sep 1939, E. C. Van Dyke, 1♀ (UCR_ENT 00079415) (CAS). **New Jersey: Sussex Co.:** Lake Marcia, 41.31732°N, 74.66683°W, 8/28/1910, Unknown, 1♂ (UCR_ENT 00080104) (WFBM). **Union Co.:** Westfield, 40.65534°N, 74.34730°W, 30 Jul 1904, Unknown, 1♀ (UCR_ENT 00079416) (CAS). **New York: Oneida Co.:** Whitesboro, 43.12417°N, 75.29611°W, 08 Sep 1959, W. F. Barr, 1♂ (UCR_ENT 00079533) (WFBM). **Suffolk Co.:** Cold Spring Harbor, Long Island, 40.87678°N, 73.47043°W, 31 Jul 1922, H. M. Parshley, 1♂ (UCR_ENT 00079394), 2♀ (UCR_ENT 00079406, UCR_ENT 00079407) (CAS); 27 Jul 1919, H. M. Parshley, 1♂ (UCR_ENT 00079395) (CAS). **The Bronx Co.:** Mosholu, 40.90320°N, 73.85940°W, 07 Aug 1902, Unknown, 1♂ (UCR_ENT 00079398) (CAS). **Tompkins Co.:** Ithaca, 42.44331°N, 76.50207°W, 04 Aug 1900, F. Sherman Jr., 1♀ (UCR_ENT 00061735) (UCR). Ithaca, 42.44056°N, 76.49694°W, 14 Aug 1900, F. Sherman, 1♂ (UCR_ENT 00065820) (UCR); 09 Aug 1902, Unknown, 1♂ (UCR_ENT 00065821) (UCR); 01 Aug 1889, Unknown, 1♂ (UCR_ENT 00096139) (LACM); 02 Aug 1889, Unknown, 1♀ (UCR_ENT 00096141) (LACM); 11 Aug 1891, Unknown, 5♀ (UCR_ENT 00096142-UCR_ENT 00096146) (LACM). Newark, 43.04667°N, 77.09528°W, 1961 - 1963, R. Lenczy, 1♂ (UCR_ENT 00096140) (LACM). **North Carolina: Haywood Co.:** Unknown, 35.52788°N, 82.95958°W, Sep 1905, R. Woglum, 1♂ (UCR_ENT 00065819) (UCR). **Macon Co.:** Highlands, 35.05250°N, 83.19694°W, 01 Sep 1951, Unknown, 1♂ (UCR_ENT 00096138), 1♀ (UCR_ENT 00096147) (LACM). **Swain Co.:** Smokemont, 35.55343°N, 83.30849°W, 20 Jul 1941, A. L. Melander, 1♀ (UCR_ENT 00061739) (UCR). **Ohio: Erie Co.:** Sandusky, Cedar Point, 41.48000°N, 82.68240°W, July 1913, Unknown, 1♂ (UCR_ENT 00079396) (CAS). **Franklin Co.:** Columbus, 39.96111°N, 82.99889°W, 8/31/1943, H. W. Smith, 3♂ (UCR_ENT 00080089-UCR_ENT 00080091) (WFBM); 8/22/1943, H. W. Smith, 2♂ (UCR_ENT 00080092, UCR_ENT 00080093) (WFBM); 9/7/1943, H. W. Smith, 3♂ (UCR_ENT 00080094-UCR_ENT 00080096) (WFBM); 8/13/1943, H. W. Smith, 1♂ (UCR_ENT 00080097), 1♀ (UCR_ENT 00080110) (WFBM); 7/26/1942, H. W. Smith, 1♀ (UCR_ENT 00080109) (WFBM); 20 Sep 1980, M.A. Ivie, 1♀ (UCR_ENT 00120204) (MTEC). Columbus, OSU, 40.00790°N, 83.02834°W, 11 Aug 1984, R. S. Miller, 1♀ (UCR_ENT 00120256) (MTEC). Northmoor Park, Columbus, 40.03479°N, 83.02602°W, 13 Aug 1978, D. Streett, 1♂ (UCR_ENT 00120254), 1♀ (UCR_ENT 00120205) (MTEC). **Henry Co.:** 4 mi. E of Napoleon at Maumee Road, 41.40712°N, 84.05719°W, 08 Jul 1991, R.S. Miller, 1♀ (UCR_ENT 00120203) (MTEC). **Morrow Co.:** Cardington, 40.49917°N, 82.89361°W, April 1977, Ralph Gordon & P. S. Bartholomew, 1♂ (UCR_ENT 00079397), 1♀ (UCR_ENT 00079417) (CAS). **Ross Co.:** Tar Hollow State Forest, 39.35090°N, 82.77156°W, 27 Sep 1988, R.S. Miller family, 2♂ (UCR_ENT 00120251, UCR_ENT 00120252), 2♀ (UCR_ENT 00120201, UCR_ENT 00120202) (MTEC); 07 Sep 1988, R.S. Miller family, 1♂ (UCR_ENT 00120253), 1♀ (UCR_ENT 00120257) (MTEC). **Warren Co.:** Caesar Creek Wilderness Area Pioneer Village, NW of Wellman, 39.49000°N, 84.04000°W, 14 Aug 1993, P.F. Bellinger, 1♀ (UCR_ENT 00123175) (UCR). **Wyandot Co.:** Sycamore, 40.95028°N, 83.17083°W, 11 Sep 1965, P.S.B., 3♂ (UCR_ENT 00079400-UCR_ENT 00079402), 1♀ (UCR_ENT 00079409) (CAS); 12 Aug 1954, P.S.B., 2♀ (UCR_ENT 00079410, UCR_ENT 00079411) (CAS). **Pennsylvania: Allegheny Co.:** 20 mi. E. Pittsburgh, 40.43220°N, 79.70497°W, 17 Aug 1962, L. D. Anderson, 1♂ (UCR_ENT 00065815) (UCR). **Westmoreland Co.:** 1.5 mi. West of Greensburg, 40.30034°N, 79.56081°W, 08 Aug 1980, Thomas A. Greager, 2♂ (UCR_ENT 00065835, UCR_ENT 00065836), 2♀ (UCR_ENT 00065837, UCR_ENT 00065838) (UCR). Jeannette, 40.32888°N, 79.61388°W, no date provided, Parshley collection, 1♂ (UCR_ENT 00079393) (CAS). **Rhode Island: Washington Co.:** Quonset Point, 41.59500°N, 71.41500°W, 08 Sep 1960, J. Sedlacek, 2♂ (UCR_ENT 00079391, UCR_ENT 00079392) (CAS). **Virginia: Carroll Co.:** Piper's Gap, 36.64400°N, 80.84200°W, 13 Aug 1953, E. L. Kessel, 1♂ (UCR_ENT 00079403) (CAS). **West Virginia: Monongalia Co.:** Morgantown, 39.62944°N, 79.95611°W, 07 Sep 2014, L.T. Miller, 2♀ (UCR_ENT 00127463, UCR_ENT 00127464) (UCR). **Unknown Co.:** Monongahela National Forest, 38.92917°N, 79.84778°W, 12 Aug 1953, E. L. Kessel, 2♂ (UCR_ENT 00079404, UCR_ENT 00079405), 1♀ (UCR_ENT 00079414) (CAS).

Phymata rossi* Evans, 1931*Total records reported: 106, Total Adult Male: 62, Total Adult Female: 38**

Specimens Examined: **USA: Arizona: Cochise Co.:** 2 mi E Onion Saddle, Chiricahua Mts., 31.93333°N, 109.22857°W, 01 Jul 1985, W. F. Barr, 1♂ (UCR_ENT 00080125) (WFBM). 3 mi W of Portal, 31.88200°N, 109.18300°W, 8/7/1983, W. F. Barr, 1♀ (UCR_ENT 00080177) (WFBM). 5 mi W of Portal, 31.35320°N, 109.14260°W, 25 Jul 1959, L. A. Stange, 1♂ (UCR_ENT 00096182) (LACM). Cave Creek Canyon, 2 mi. S. of Portal, 31.89949°N, 109.15925°W, 19 Aug 1964, R. C. Dickenson, 1♀ (UCR_ENT 00065867) (UCR). Cave Creek Canyon, Chiricahua Mountains, Sunny Flat, 31.88333°N, 109.16667°W, 01 Jun 1981, H. A. Hespeneheide, 1♀ (UCR_ENT 00123191) (UCR); 01 Jun 1997, I. A. Chacon, 1♂ (UCR_ENT 00123192) (UCR). Floor of Carr Cn., Huachuca Mts., 31.45677°N, 110.23952°W, 08 Aug 1932 - 09 Aug 1932, H. B. Leech & J. W. Green, 1♂ (UCR_ENT 00079420) (CAS). Huachuca Mountains, Carr Canyon Rd., 31.44764°N, 110.27825°W, 29 Jun 2015, C. Weirauch, 1♂ (UCR_ENT 00121787), 1♀ (UCR_ENT 00123296) (UCR). Huachuca Mts., Ash Canyon, 31.38059°N, 110.25513°W, 7/29/1979, W. F. Barr, 3♂ (UCR_ENT 00080122-UCR_ENT 00080123, UCR_ENT 00080205), 1♀ (UCR_ENT 00080128) (WFBM). Portal, 5 miles west of, 31.91367°N, 109.22693°W, 25 Jun 1959, L.A. Strange, 1♂ (UCR_ENT 00086559) (LACM). **Coconino Co.:** Oak Creek Canyon, Todd's lodge, 34.91238°N, 111.72688°W, 15 Jun 1946, John Sperry, 1♂ (UCR_ENT 00061604) (UCR). **Gila Co.:** 2 mi. E of Star Valley, Highway 160, 34.26408°N, 111.22370°W, 23 Aug 1967, Pendleton & Ziff, 1♀ (UCR_ENT 00096199) (LACM). Six Shooter Canyon, Near Globe, 33.38111°N, 110.76944°W, 17 Aug 1958, Lionel A. Stange, 1♂ (UCR_ENT 00096178) (LACM); 16 Aug 1958, Lionel A. Stange, 2♀ (UCR_ENT 00096179, UCR_ENT 00096180) (LACM). **Mohave Co.:** Hualapai Mountain Park, 35.06627°N, 113.90239°W, 30 Jun 1966, W. F. Barr, 1♂ (UCR_ENT 00080204) (WFBM). Hualapai Mountains, D-W Ranch Road, 35.14552°N, 113.91235°W, 25 Sep 1989, D.C. Hawks & G. P. Bruyeca, 1♀ (UCR_ENT 00061601) (UCR). Hualapai Mts. 12 mi SE Kingman, 35.06626°N, 113.90161°W, 6/30/1966, W. F. Barr, 1♀ (UCR_ENT 00080131) (WFBM). Hualapai Mts. S. of Kingman, 34.90001°N, 113.88411°W, 30 Jul 1965, M. E. Irwin, 3♂ (UCR_ENT 00065886-UCR_ENT 00065887, UCR_ENT 00065889) (UCR). Hualapai Mt. Park, 35.08973°N, 113.88860°W, 11/30/1966, W. F. Barr, 1♀ (UCR_ENT 00080133) (WFBM). **Pima Co.:** Baboquivari Mountains, Brown Canyon, 31.75667°N, 111.51917°W, 07 Sep 1958, Menke & Stange, 4♂ (UCR_ENT 00096169-UCR_ENT 00096172), 4♀ (UCR_ENT 00096183-UCR_ENT 00096186) (LACM). Baboquivari Mountains, N slope Kitt Pk., 31.94707°N, 111.61466°W, 8/31/1987, W. F. Barr, 7♂ (UCR_ENT 00080111-UCR_ENT 00080117), 2♀ (UCR_ENT 00080127, UCR_ENT 00080129) (WFBM). Madera Canyon, Santa Rita Mountains, 31.74196°N, 110.88526°W, 24 Aug 1952, Lloyd M. Martin, 1♂ (UCR_ENT 00096176), 1♀ (UCR_ENT 00096177) (LACM). Santa Rita Mountains, Madera Canyon, 31.72784°N, 110.88061°W, 8-5-1965, R. H. Crandall, 1♀ (UCR_ENT 00096197) (LACM). **Pinal Co.:** Below Pinal Mt. summit, 12 mi S of Globe, 33.28223°N, 110.82206°W, 30 Jul 1984, W. F. Barr, 1♂ (UCR_ENT 00080206) (WFBM). Florence Junction, 33.25900°N, 111.33700°W, 4/16/1985, W. F. Barr, 1♀ (UCR_ENT 00080130) (WFBM). Pinalo Mt. summit 12 mi S Globe, 33.22010°N, 110.78649°W, 8/30/1984, W. F. Barr, 4♂ (UCR_ENT 00080118-UCR_ENT 00080121) (WFBM). **Santa Cruz Co.:** Santa Rita Mountains, 31.82592°N, 110.77480°W, 15 September 1933, Bryant, 1♀ (UCR_ENT 00080132) (WFBM). **Yavapai Co.:** Bloody Basin, 34.17476°N, 111.80376°W, 04 Sep 1944, R. A. Flock, 1♀ (UCR_ENT 00065910) (UCR). Dewey, 34.53000°N, 112.24060°W, 29 Jul 1969, R. Hancock, 1♂ (UCR_ENT 00096181) (LACM). Granite Dells 4 Miles N Prescott, 34.59805°N, 112.46850°W, 5 August 1970, Lloyd M. Martin, 21♂ (UCR_ENT 00096148-UCR_ENT 00096168), 9♀ (UCR_ENT 00096187-UCR_ENT 00096195) (LACM). Granite Dells, 4 mi N of Prescott, 34.60600°N, 112.41100°W, 19 July 1970, Lloyd M. Martin, 3♂ (UCR_ENT 00096173-UCR_ENT 00096175), 1♀ (UCR_ENT 00096196) (LACM). **unknown Co.:** Arizona, 34.35233°N, 111.49290°W, No date provided, Unknown, 1♂ (UCR_ENT 00079419) (CAS). unknown, 34.14605°N, 111.47020°W, no date provided, D. Soto, 1♀ (UCR_ENT 00001977) (UCR). **California: Riverside Co.:** Coachella, 33.68030°N, 116.17389°W, 16 May 1917, E. P. Van Duzee, 6 Juvenile sex unknown (UCR_ENT 00079424-UCR_ENT 00079429) (CAS). **New Mexico: Hidalgo Co.:** Double Adobe Ranch, Animas Mountains, 31.94889°N, 108.80667°W, 15 Aug 1952, H. B. Leech & J. W. Green, 3♂ (UCR_ENT 00079421-UCR_ENT 00079423) (CAS); 15 Aug 1952, H. B. Leach, 3♀ (UCR_ENT 00079430-UCR_ENT 00079432) (CAS). **Texas: El Paso Co.:** Franklin Mountains, McKelligon Canyon, 31.83424°N, 106.47731°W, 31 May 1989, W. F. Barr, 1♂ (UCR_ENT 00080207) (WFBM). **Utah: Washington Co.:** Zion National Park, 37.24861°N, 112.95583°W, 7-12-29, C. C. Searl, 1♀ (UCR_ENT 00078788) (SDNH).

Phymata saileri* Kormilev, 1957*Total records reported: 3, Total Adult Male: 1, Total Adult Female: 2**

Specimens Examined: **USA: Arizona: Cochise Co.:** 2-4 mi. W Portal, 31.91383°N, 109.20984°W, 31 Jul 1988, Lajeunesse, 1♀ (UCR_ENT 00120199) (MTEC). Foothills Rd nr. Portal, 31.91924°N, 109.12785°W, 17 Jun 2015, P.K. Masonick & A.J. Baker, 1♀ (UCR_ENT 00121785) (UCR). Foothills Road 4 mi. NW Portal, 31.91667°N, 109.15000°W, May 1997, M. Brown, 1♂ (UCR_ENT 00123190) (UCR).

Phymata salicis* Cockerell, 1900*Total records reported: 23, Total Adult Male: 13, Total Adult Female: 9**

Specimens Examined: **MEXICO: Baja California: None or Unknown Co.:** Mexicali, 32.65194°N, 115.46833°W, 20 Jun 1939, E. S. Ross, 1♀ (UCR_ENT 00098977) (CAS). **USA: Arizona: Coconino Co.:** Grand Canyon National Park: Colorado River mi. 112R, 36.23935°N, 112.40586°W, 30 Sep 2012, L.E. Stevens, 1♂ (UCR_ENT 00127629) (UCR). **Maricopa Co.:** Buckeye, 33.37028°N, 112.58306°W, 18 Jun 1935, Ball, 1♂ (UCR_ENT 00080064) (WFBM). Granite Reef Dam, 33.51611°N, 111.69111°W, 25 Jun 1967, W. F. Barr, 2♂ (UCR_ENT 00080066, UCR_ENT 00080067) (WFBM). Phoenix, 33.61694°N, 111.98694°W, 01 Jul 1902, H. G. Barber, 1♀ (UCR_ENT 00098978) (CAS); 25 Sep 1902, Barber, 1♀ (UCR_ENT 00098979) (CAS). **Mohave Co.:** Bullhead City, 35.14778°N, 114.56750°W, 10 Jul 1974, L. A. Lacey, 1♂ (UCR_ENT 00061724) (UCR). **Pinal Co.:**

Florence Junction, 33.25900°N, 111.33700°W, 17 Apr 1964, A. R. Gittins, 1♂ (UCR_ENT 00080065) (WFBM). **Yuma Co.:** Dome, 32.75528°N, 114.36139°W, 21 Jul 1924, J. O. Martin, 1;u (UCR_ENT 00098975) (CAS). Gila River, 32.78261°N, 113.81342°W, 24 Jun 1963, D. Richman, 2♀ (UCR_ENT 00096204, UCR_ENT 00096205) (LACM). **California: Imperial Co.:** Calexico, 32.67889°N, 115.49806°W, 02 Oct 1947, R. A. Flock, 1♀ (UCR_ENT 00063052) (UCR). El Centro, 32.79194°N, 115.56222°W, 03 Nov 1948, R. A. Flock, 1♀ (UCR_ENT 00063051) (UCR). Holtville, 32.81111°N, 115.37944°W, 20 Jun 1939, E. S. Ross, 1♀ (UCR_ENT 00098976) (CAS). Potholes, 32.82889°N, 114.50389°W, 08 Apr 1923, E. P. Van Duzee, 1♂ (UCR_ENT 00098973) (CAS). Signal Mt., 32.67882°N, 115.62736°W, 4-31-1949, R. A. Flock, 1♀ (UCR_ENT 00063053) (UCR). Westmorland, 33.03722°N, 115.62138°W, 23 May 1930, Timberlake, 1♂ (UCR_ENT 00065824) (UCR); Jun 1930, H. Gentry, 2♂ (UCR_ENT 00098971, UCR_ENT 00098972) (CAS). **Riverside Co.:** 25 mi N of Blythe, 33.96200°N, 114.52700°W, 06 Jul 1947, W. F. Barr, 1♂ (UCR_ENT 00080068) (WFBM). **San Bernardino Co.:** Needles, 34.84806°N, 114.61333°W, 16 Dec 1921, J. A. Kusche, 1♂ (UCR_ENT 00098974) (CAS). **Nevada: Clark Co.:** Virgin River at Mesquite, 36.78833°N, 114.09333°W, 12 Jul 2011, S. M. Clark, 1♂ (UCR_ENT 00127630) (UCR).

***Phymata stanfordi* Evans, 1931**

Total records reported: 101, Total Adult Male: 63, Total Adult Female: 37

Specimens Examined: **USA: California: Calaveras Co.:** Salt Springs Res., 38.49610°N, 120.17837°W, 04 Sep 1961, J. K. Drew, 1♂ (UCR_ENT 00079286), 1♀ (UCR_ENT 00079322) (CAS). **Contra Costa Co.:** Antioch, 38.00500°N, 121.80472°W, Sep 1936, IR. C. Dickerson, 1♂ (UCR_ENT 00061621) (UCR); 13 Aug 1952, W. F. Barr, 1♀ (UCR_ENT 00080201) (WFBM). Antioch, 38.00000°N, 121.81000°W, Sep 1036, IR. C. Dickerson, 1♀ (UCR_ENT 00065810) (UCR). **Kern Co.:** Piute Mountain Road T28 1/2S R33E, 35.39587°N, 119.82330°W, 05 Sep 1971, J. P. Donahue, 5♂ (UCR_ENT 00096038-UCR_ENT 00096042) (LACM). **Monterey Co.:** 8 mi NE of San Miguel, 35.83483°N, 120.63150°W, 04 Sep 2017, P. Masonick & C. Dodge, 3♂ (UCR_ENT 00127598-UCR_ENT 00127600), 2♀ (UCR_ENT 00127597, UCR_ENT 00127601) (UCR). **San Benito Co.:** 0.5 mi SE of Priest Valley on Rt 198, 36.16681°N, 120.66250°W, 08 Sep 1970, Bartholomew, 2♀ (UCR_ENT 00079389, UCR_ENT 00079390) (CAS). **San Joaquin Co.:** Lodi, 38.13020°N, 121.27244°W, 09 Aug 1907, F. E. Blaisdell, 4♂ (UCR_ENT 00099063-UCR_ENT 00099066), 1♀ (UCR_ENT 00099067) (CAS). Stockton, 37.95778°N, 121.28972°W, 24 Aug 1950, R. P. Allen, 1♂ (UCR_ENT 00079339) (CAS). **San Luis Obispo Co.:** 4 mi. NE Paso Robles, 35.66765°N, 120.64053°W, 25 Sep 1927, Unknown, 2♂ (UCR_ENT 00099060, UCR_ENT 00099061), 1♀ (UCR_ENT 00099062) (CAS). **Santa Clara Co.:** San Jose, 37.33940°N, 121.89389°W, 1906, Unknown, 1♀ (UCR_ENT 00096065) (LACM). Santa Clara County, no locality specified, 37.23249°N, 121.69627°W, No date provided, Unknown, 1♀ (UCR_ENT 00099068) (CAS); No date provided, Baker, 1♀ (UCR_ENT 00099069) (CAS). Stanford University, 37.42722°N, 122.16917°W, 18 Sep 1909, Unknown, 2♂ (UCR_ENT 00096031, UCR_ENT 00096032) (LACM); Apr 1937, Unknown, 1♀ (UCR_ENT 00096061) (LACM); May 1937, Unknown, 1♀ (UCR_ENT 00096062) (LACM); 19 Sep 1897, Brunton, 1♀ (UCR_ENT 00096063) (LACM); 12 Sep 1909, Unknown, 1♀ (UCR_ENT 00096064) (LACM). **Sonoma Co.:** Sonoma, 38.29027°N, 122.45972°W, 15 Aug 1952, Jay C. Quast, 1♀ (UCR_ENT 00096059) (LACM); 28 Jul 1952, Jay C. Quast, 1♀ (UCR_ENT 00096060) (LACM). **Stanislaus Co.:** Del Puerto Canyon, Frank Raines Park, 37.48833°N, 121.20583°W, 13 May 1972, R. M. Brown, 1♂ (UCR_ENT 00079346) (CAS). **Yolo Co.:** Davis, 38.54500°N, 121.73944°W, 12 Aug 1965, G.A. Gorelick, 14♂ (UCR_ENT 00096072-UCR_ENT 00096085), 2♀ (UCR_ENT 00096119, UCR_ENT 00096120) (LACM); 25 Jul 1965, G.A. Gorelick, 2♂ (UCR_ENT 00096086, UCR_ENT 00096087) (LACM); 27 Jul 1965, G.A. Gorelick, 2♂ (UCR_ENT 00096088, UCR_ENT 00096089) (LACM); 18 Aug 1965, G.A. Gorelick, 2♂ (UCR_ENT 00096090, UCR_ENT 00096091) (LACM); 19 Aug 1965, G.A. Gorelick, 1;u (UCR_ENT 00096115), 19♂ (UCR_ENT 00096092-UCR_ENT 00096110), 4♀ (UCR_ENT 00096131-UCR_ENT 00096134) (LACM); 23 Aug 1965, G.A. Gorelick, 3♂ (UCR_ENT 00096111-UCR_ENT 00096113), 5♀ (UCR_ENT 00096121-UCR_ENT 00096125) (LACM); 25 Aug 1965, G.A. Gorelick, 1♂ (UCR_ENT 00096114), 4♀ (UCR_ENT 00096127-UCR_ENT 00096130) (LACM); 01 Jul 1969, R. L. Dunn, 1♀ (UCR_ENT 00096116) (LACM); 01 Aug 1969, R. L. Dunn, 1♀ (UCR_ENT 00096117) (LACM); 15 Aug 1969, R. L. Dunn, 1♀ (UCR_ENT 00096118) (LACM); 28 Aug 1965, G.A. Gorelick, 1♀ (UCR_ENT 00096126) (LACM).