**Appendix 1.** Material examined

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Taxon | ♂ | ♀ | Date | Nation | State/Prov | County/Region | Location | Collector |
| *Archaebranchinecta pollicifera* Harding, 1940 | 5 | 5 | 26 Feb 04 | Bolivia | Sajama |  |  | J. Coronel, S. Declerk |
| *Branchinecta* *achalensis* Cesar, 1985 | 10 | 10 |  | Uruguay | Rocha |  |  | F. Racz Lorenz |
| *B. belki* Maeda-Martínez et al., 1993 | 1 | 1 | 2 Sept 1981 | Mexico | Coahuila | El Dorado | 101°35’W, 25°39’30”N | A. Maeda-Martinez |
| *B. campestris* Lynch, 1960 | 23 | 23 | 2 Mar 05 | USA | CA | San Luis Obispo | Carrizo Plains | K. Sharum |
| *B. campestris* Lynch, 1960 | 24 | 24 |  | USA | WA | Grant | Colombia NWR | E. Kelchlin |
| *B. coloradensis* Packard, 1874 | 12 | 12 | 24 Mar 04 | USA | ID | Ada | Orchard Training Area | J. Weaver |
| *B. coloradensis* Packard, 1874 | 23 | 23 | 18 Mar 98 | USA | CA | Lassen | Sloat Ranch | D.C. Rogers |
| *B. coloradensis* Packard, 1874 | 21 | 23 | 15 Jul 97 | USA | UT | Duchesne | Butterfly Lake pool | S. Maynard |
| *B. coloradensis* Packard, 1874 | 21 | 15 | 22 Jan 96 | USA | CA | Glenn | Sacramento Wildlife Refuge | D.C. Rogers |
| *B. coloradensis* Packard, 1874 | 15 | 10 | 23 Mar 06 | USA | OR | Malheur | Jordan Valley | D.C. Rogers |
| *B. coloradensis* Packard, 1874 | 13 | 10 | 24 Jun 95 | USA | MT | Teton | Dupuyer Pool | D.L Gustafson |
| *B. conservatio* Eng et al., 1990 | 41 | 41 | 7 Apr 1986 | USA | CA | Solano | Olcot lake | D. C. Rogers |
| *B. constricta* Rogers, 2006 | 22 | 20 | 4 Jun 90 | USA | WY | Fremont | Granite Mtns | G. D. Langstaff |
| *B. cornigera* Lynch, 1958 | 10 | 12 | 13 Apr 99 | USA | WA | Grant | Dry Falls Dam | R. E. Hill |
| *B. cornigera* Lynch, 1958 | 11 | 14 | 26 May 98 | USA | WA | Lincoln | 14 mi E of Creston | D.C. Rogers |
| *B. dissimilis* Lynch, 1972 | 19 | 12 | 24 Mar 98 | USA | CA | Modoc | Clear Lake Road | D.C. Rogers |
| *B. dissimilis* Lynch, 1972 | 12 | 15 | 16 Apr 99 | USA | CA | Siskiyou | Murphy's Well | D.C. Rogers |
| *B. ferrolimneta* Rogers & Ferreira, 2007 | 16 | 12 | 19 Mar 99 | Brazil | Minas Gerias | Nova Lima | Capao Xavier | A. Ferreira |
| *B. ferox* (Milne-Edwards, 1840) | 1 | 1 | Apr 07 | Jordan |  |  |  | E. Eid |
| *B. gaini* Daday, 1910 | 1 | 0 | 4 Feb 05 | Antarctica |  |  | Antarctic Peninsula | Unknown |
| *B. gigas* Lynch, 1937 | 10 | 11 | 14 Mar 07 | USA | NV | Washoe | White lake | D.C. Rogers |
| *B. gigas* Lynch, 1937 | 11 | 10 | 18 Apr 03 | USA | CA | Siskiyou | Indian Tom Pool | D.C. Rogers |
| *B. gigas* Lynch, 1937 | 10 | 12 | 18 Mar 09 | USA | CA | Kern | Edward's Air Force Base | D.C. Rogers |
| *B. granulosa* Daday, 1902 | 3 | 3 | 1 Nov 2001 | Chile | Kon-Aiken |  | Kon Aiken | P. De Los Rios |
| *B. hiberna* Rogers & Fugate, 2001 | 20 | 21 | 10 Mar 06 | USA | NV | Humboldt | Paradise Valley @ Button Lake |  |
| *B. hiberna* Rogers & Fugate, 2001 | 26 | 21 | 17 Mar 98 | USA | CA | Modoc | Harvey Buttes | D.C. Rogers/ C.L. Rogers |
| *B. hiberna* Rogers & Fugate, 2001 | 25 | 25 | 8 Mar 04 | USA | ID | Ada | Valley Pool | J. Weaver |
| *B. iheringi* Lilljeborg, 1889 | 2 | 2 | Aug 2008 | Brazil | Rio Grande do Sul | Rio Grande |  | M.V. Volcan |
| *B. kaibabensis* Belk & Fugate, 2000 | 14 | 21 | 8 Mar 1977 | USA | AZ | Coconino | 25.2 mi S of Jacob Lake | D. Belk |
| *B. lateralis* Rogers, 2006 | 10 | 12 | 8 Jun 1987 | USA | WY | Sweetwater | 42º12’41”, 108º07’01” | G. D. Langstaff |
| *B. lindahli* Packard, 1883 | 21 | 24 | 12 Mar 2009 | USA | NV | Mineral | Schurtz, at Hwy 95 | W Shaul, A. Shaul |
| *B. lindahli* Packard, 1883 | 13 | 20 | 31 Jan 05 | USA | CA | Los Angeles | Lancaster | D. Kasper |
| *B. lindahli* Packard, 1883 | 33 | 20 | 2 May 01 | USA | NM | Taos | Red Gates Tank | D.C. Rogers/ B.K. Lang |
| *B. lindahli* Packard, 1883 | 25 | 21 | 18 Mar 04 | USA | ID | Ada | Cindercone Butte Pool | J. Weaver |
| *B. lindahli* Packard, 1883 | 13 | 10 | 16 Mar 09 | USA | CA | Kern | Edward's Air Force Base | D.C. Rogers |
| *B. longiantenna* Eng et al., 1990 | 22 | 20 | 8 Mar 94 | USA | CA | San Luis Obispo | Carrizo Plains | D.C. Rogers |
| *B. lynchi* Eng et al., 1990 | 5 | 5 |  | USA | CA | Merced | 37.38101-120.3628 | A. Aguilar |
| *B. lynchi* Eng et al., 1990 | 31 | 30 | 10 Dec 07 | USA | CA | Placer | south of Rodeo Grounds | D.C. Rogers |
| *B. mackini* Dexter, 1956 | 20 | 22 | 14 Mar 07 | USA | NV | Washoe | White lake | D.C. Rogers |
| *B. mackini* Dexter, 1956 | 23 | 21 | 28 Feb 01 | USA | CA | Madera | Madera Ranch | D.C. Rogers |
| *B. mackini* Dexter, 1956 | 32 | 24 | 25 Nov 96 | USA | CA | Solano | Bird's Landing | D.C. Rogers |
| *B. mackini* Dexter, 1956 | 31 | 30 | 18 Mar 04 | USA | ID | ADA | Armadillo Playa | J. Weaver |
| *B. mackini* Dexter, 1956 | 14 | 13 | 30 Mar 07 | USA | WA | Grant | Beverley | D.C. Rogers |
| *B. mackini* Dexter, 1956 | 11 | 13 | 19 Mar 09 | USA | CA | Kern | Edward's Air Force Base | D.C. Rogers |
| *B. mesovallensis* Belk & Fugate, 2000 | 20 | 20 | 9 Feb 00 | USA | CA | San Joaquin | Acampo Road |  |
| *B. mexicana* Maeda-Martínez et al., 1993 | 1 | 1 | 13 Oct 1996 | Mexico | Puebla |  | San Salvador El Seco | A. Maeda-Martínez |
| *B. oriena* Belk & Rogers, 2002 | 12 | 10 | 8 Apr 06 | USA | NV | Douglas | Leviathan Mine Road | W. Shaul, A. Shaul |
| *B. oriena* Belk & Rogers, 2002 | 22 | 23 | 4 Apr 00 | USA | NV | Storey | Geiger Summit Pool | D.C. Rogers |
| *B. oriena* Belk & Rogers, 2002 | 33 | 32 | 10 May 08 | USA | CA | Siskiyou | White Deer Lake | D.C. Rogers |
| *B. orientalis* Sars, 1901 | 1 | 1 | 19 May 06 | Turkey | Kayseri |  | Col Goln-s-Inesui | D. Brzoska |
| *B. oterosanvinceti* Obregon-Barbóza et al., 2002 | 4 | 4 | 27 Mar 03 | Mexico | Baja Norte |  | nr Lagua de Chapala |  |
| *B. packardi* Pearse, 1912 | 10 | 10 | 26 Apr 00 | USA | NM | Cibola | El Malpais | B. Lang |
| *B. packardi* Pearse, 1912 | 16 | 12 | 26 Jul 95 | USA | MT | Louis & Clark | Alkali Flat | D. Gustafsen |
| *B. packardi* Pearse, 1914 | 19 | 11 | 22 Aug 2001 | USA | NM | Cibola | Jara Mesa | B. Lang |
| *B. paludosa* (Müller, 1788) | 16 | 10 | 27 Jul 05 | Canada | Manitoba |  | Twin Lakes | D. Post |
| *B. paludosa* (Müller, 1788) | 13 | 14 | 1 Aug 03 | USA | WY | Park | pool nr. 5 acre Lake | D. Stagliano |
| *B. palustris* Biraben, 1946 | 3 | 3 | 2 Apr 99 | Chile | Atacama |  | Salar de Huasco | O. Zuniga |
| *B. papillata* Rogers et al., 2008 | 12 | 12 | 2 Apr 99 | Chile | Atacama |  | 20º40’11”, 68º42’15”W | O. Zuñiga |
| *B. potassa* Belk, 1979 | 25 | 25 |  | USA | Nebraska | Cherry | Valentine Wildlife Refuge | M. Fugate |
| *B. raptor* Rogers et al., 2006 | 14 | 18 | 31 Mar 04 | USA | ID | Elmore | Armadillo Playa | L. Evans, D Quinney |
| *B. readingi* Belk, 2001 | 18 | 16 | 11 Jun 1993 | USA | WY | Fremont | 42º27’05”, 104º27’03” | G. Langstaff |
| *B. roacensis* Cohen, 1982 | 3 | 3 | 2 Jun 1987 | Argentina | Rio Negro |  | 119.75 km east of Neuquen | K.A.L. Reading |
| *B. sandiegonensis* Fugate, 1993 | 15 | 17 | 15 Jan 96 | USA | CA | San Diego | Kearny Mesa | D.C. Rogers |
| *B. sandiegonensis* Fugate, 1993 | 24 | 25 | 21 Jan 1996 | USA | CA | San Diego | Otay Mesa | D.C. Rogers |
| *B. serrata* Rogers, 2006 | 25 | 25 | 25 Jun 95 | USA | WY | Fremont | Bull Canyon Pond | G. D. Langstaff |
| *B. valchetana* Cohen, 1981 | 4 | 4 | March 2016 | Argentina | Chubut |  |  | L. Epele |
| *B. vuriloche* Cohen, 1985 | 4 | 4 | 21 Jan 2017 | Argentina | Chubut |  |  | L. Epele |
| *Linderiella occidentalis* | 34 | 34 | 12 Mar 2009 | USA | CA | Merced | 37.38101-120.3628 | A. Aguilar |
| *Eubranchipus oregonus* | 32 | 32 | 17 Apr 1999 | USA | CA | Siskiyou | Mt Shasta | D.C. Rogers |