

Teder, T. 2020. Phenological responses to climate warming in temperate moths and butterflies: species traits predict future changes in voltinism. – Oikos doi: 10.1111/oik.07119

## Appendix 1

Table A1. Data used in the analyses of voltinism. Size = adult wing span. Abbreviations: overwintering stage: E = egg, L = larva, P = pupa, A = adult, AP = adult within pupal case (classified as adult overwinterers in the analysis); host type: W = woody plants (species feeding exclusively on coniferous trees are indicated by W(c)), F = forbs, G = grasses (endophagous grass-feeders are indicated by G(i)), WH = woody + herbaceous plants, L = lichens; larval diet breadth: M = monophagous, O = oligophagous, P = polyphagous; voltinism: U = univoltine, M = multivoltine.

| Superfamily   | Family       | Subfamily      | Genus                             | Species                      | Size | Overwintering stage | Host type | Larval diet breadth | Voltinism |
|---------------|--------------|----------------|-----------------------------------|------------------------------|------|---------------------|-----------|---------------------|-----------|
| Papilionoidea | Papilionidae | Parnassiinae   | Parnassius Latreille, 1804        | apollo (Linnaeus, 1758)      | 78.5 | E                   | F         | M                   | U         |
| Papilionoidea | Papilionidae | Parnassiinae   | Parnassius Latreille, 1804        | mnemosyne (Linnaeus, 1758)   | 57.0 | E                   | F         | M                   | U         |
| Papilionoidea | Papilionidae | Papilioninae   | Papilio Linnaeus, 1758            | machaon Linnaeus, 1758       | 79.5 | P                   | F         | O                   | M         |
| Papilionoidea | Hesperiidae  | Pyrginae       | Pyrgus Hübner, 1819               | malvae (Linnaeus, 1758)      | 23.0 | P                   | F         | O                   | M         |
| Papilionoidea | Hesperiidae  | Pyrginae       | Pyrgus Hübner, 1819               | alveus (Hübner, 1803)        | 26.5 | L                   | F         | O                   | U         |
| Papilionoidea | Hesperiidae  | Heteropterinae | Carterocephalus Lederer, 1852     | palaemon (Pallas, 1771)      | 26.5 | L                   | G         | O                   | U         |
| Papilionoidea | Hesperiidae  | Hesperiinae    | Thymelicus Hübner, 1819           | lineola (Ochsenheimer, 1808) | 24.0 | E                   | G         | O                   | U         |
| Papilionoidea | Hesperiidae  | Hesperiinae    | Hesperia Fabricius, 1793          | comma (Linnaeus, 1758)       | 29.5 | L                   | G         | O                   | U         |
| Papilionoidea | Hesperiidae  | Hesperiinae    | Ochlodes Scudder, 1872            | sylvanus (Esper, 1777)       | 27.5 | L                   | G         | O                   | M         |
| Papilionoidea | Pieridae     | Dismorphiinae  | Leptidea Billberg, 1820           | juvernica (Williams, 1946)   | 40.0 | P                   | F         | O                   | M         |
| Papilionoidea | Pieridae     | Dismorphiinae  | Leptidea Billberg, 1820           | sinapis (Linnaeus, 1758)     | 37.0 | P                   | F         | O                   | M         |
| Papilionoidea | Pieridae     | Pierinae       | Anthocharis Boisduval et al, 1833 | cardamines (Linnaeus, 1758)  | 40.5 | P                   | F         | O                   | U         |
| Papilionoidea | Pieridae     | Pierinae       | Aporia Hübner, 1819               | crataegi (Linnaeus, 1758)    | 59.0 | L                   | W         | O                   | U         |
| Papilionoidea | Pieridae     | Pierinae       | Pieris Schrank, 1801              | brassicae (Linnaeus, 1758)   | 55.5 | P                   | F         | O                   | M         |
| Papilionoidea | Pieridae     | Pierinae       | Pieris Schrank, 1801              | rapae (Linnaeus, 1758)       | 43.5 | P                   | F         | O                   | M         |
| Papilionoidea | Pieridae     | Pierinae       | Pieris Schrank, 1801              | napi (Linnaeus, 1758)        | 39.5 | P                   | F         | O                   | M         |

|               |             |              |                               |                                       |      |   |    |   |   |
|---------------|-------------|--------------|-------------------------------|---------------------------------------|------|---|----|---|---|
| Papilionoidea | Pieridae    | Coliadinae   | Colias Fabricius, 1807        | hyale (Linnaeus, 1758)                | 36.5 | L | F  | O | M |
| Papilionoidea | Pieridae    | Coliadinae   | Colias Fabricius, 1807        | palaeno (Linnaeus, 1761)              | 47.0 | L | F  | M | U |
| Papilionoidea | Pieridae    | Coliadinae   | Gonepteryx Leach, 1815        | rhamni (Linnaeus, 1758)               | 49.0 | A | W  | O | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Thecla Fabricius, 1807        | betulae (Linnaeus, 1758)              | 34.5 | E | W  | M | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Favonius Sibatani & Ito, 1942 | quercus (Linnaeus, 1758)              | 31.0 | E | W  | M | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Satyrrium Scudder, 1876       | w-album (Knoch, 1782)                 | 27.5 | E | W  | M | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Satyrrium Scudder, 1876       | pruni (Linnaeus, 1758)                | 30.5 | E | W  | M | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Callophrys Billberg, 1820     | rubi (Linnaeus, 1758)                 | 23.0 | P | WH | P | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Lycaena Fabricius, 1807       | phlaeas (Linnaeus, 1761)              | 26.0 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Lycaena Fabricius, 1807       | dispar (Haworth, 1809)                | 37.0 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Lycaena Fabricius, 1807       | virgaureae (Linnaeus, 1758)           | 26.5 | E | F  | M | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Lycaena Fabricius, 1807       | hippotoe (Linnaeus, 1761)             | 30.5 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Cupido Schrank, 1801          | minimus (Fuessly, 1775)               | 23.0 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Cupido Schrank, 1801          | argiades (Pallas, 1771)               | 27.0 | L | F  | O | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Celastrina Tutt, 1906         | argiolus (Linnaeus, 1758)             | 26.5 | P | WH | P | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Scolitantides Hübner, 1819    | vicrama (Moore, 1865)                 | 22.5 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Scolitantides Hübner, 1819    | orion (Pallas, 1771)                  | 25.5 | P | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Glaucopteryx Scudder, 1872    | alexis (Poda, 1761)                   | 29.0 | P | F  | O | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Glaucopteryx Scudder, 1872    | arion (Linnaeus, 1758)                | 34.0 | L | F  | O | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | artaxerxes (Fabricius, 1793)          | 26.5 | L | F  | O | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | eumedon (Esper, 1780)                 | 27.5 | L | F  | M | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | argus (Linnaeus, 1758)                | 23.0 | E | F  | P | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | idas (Linnaeus, 1761)                 | 23.5 | E | F  | P | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | optilete (Knoch, 1781)                | 24.5 | L | F  | O | U |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | semiargus (Rottemburg, 1775)          | 27.5 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | amandus (Schneider, 1792)             | 32.0 | L | F  | M | M |
| Papilionoidea | Lycaenidae  | Lycaeninae   | Plebeius Kluk, 1780           | icarus (Rottemburg, 1775)             | 29.0 | L | F  | O | M |
| Papilionoidea | Nymphalidae | Heliconiinae | Argynnis Fabricius, 1807      | paphia (Linnaeus, 1758)               | 60.5 | L | F  | M | U |
| Papilionoidea | Nymphalidae | Heliconiinae | Argynnis Fabricius, 1807      | aglaja (Linnaeus, 1758)               | 50.0 | L | F  | M | U |
| Papilionoidea | Nymphalidae | Heliconiinae | Argynnis Fabricius, 1807      | adippe (Denis & Schiffermüller, 1775) | 52.5 | E | F  | M | U |
| Papilionoidea | Nymphalidae | Heliconiinae | Argynnis Fabricius, 1807      | niobe (Linnaeus, 1758)                | 47.5 | E | F  | M | U |
| Papilionoidea | Nymphalidae | Heliconiinae | Issoria Hübner, 1819          | lathonia (Linnaeus, 1758)             | 42.0 | L | F  | M | M |
| Papilionoidea | Nymphalidae | Heliconiinae | Brenthis Hübner, 1819         | ino (Rottemburg, 1775)                | 34.5 | E | F  | O | U |
| Papilionoidea | Nymphalidae | Heliconiinae | Boloria Moore, 1900           | euphrosyne (Linnaeus, 1758)           | 36.0 | L | F  | M | M |

|               |             |              |                             |  |      |    |    |   |   |
|---------------|-------------|--------------|-----------------------------|--|------|----|----|---|---|
| Papilionoidea | Nymphalidae | Heliconiinae | Boloria Moore, 1900         | selene (Denis & Schiffermüller, 1775)      | 35.5 | L  | F  | M | M |
| Papilionoidea | Nymphalidae | Heliconiinae | Boloria Moore, 1900         | aquilonaris (Stichel, 1908)                | 33.5 | L  | F  | O | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Araschnia Hübner, 1819      | levana (Linnaeus, 1758)                    | 33.5 | P  | F  | M | M |
| Papilionoidea | Nymphalidae | Nymphalinae  | Nymphalis Kluk, 1802        | io (Linnaeus, 1758)                        | 53.5 | A  | F  | M | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Nymphalis Kluk, 1802        | urticae (Linnaeus, 1758)                   | 46.5 | A  | F  | M | M |
| Papilionoidea | Nymphalidae | Nymphalinae  | Nymphalis Kluk, 1802        | polychloros (Linnaeus, 1758)               | 56.5 | A  | W  | P | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Nymphalis Kluk, 1802        | xanthomelas (Denis & Schiffermüller, 1775) | 61.5 | A  | W  | O | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Nymphalis Kluk, 1802        | antiopa (Linnaeus, 1758)                   | 62.5 | A  | W  | O | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Nymphalis Kluk, 1802        | c-album (Linnaeus, 1758)                   | 45.5 | A  | WH | P | M |
| Papilionoidea | Nymphalidae | Nymphalinae  | Euphydryas Scudder, 1872    | maturna (Linnaeus, 1758)                   | 39.5 | L  | W  | O | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Euphydryas Scudder, 1872    | aurinia (Rottemburg, 1775)                 | 35.5 | L  | F  | O | U |
| Papilionoidea | Nymphalidae | Nymphalinae  | Melitaea Fabricius, 1807    | cinxia (Linnaeus, 1758)                    | 35.5 | L  | F  | O | M |
| Papilionoidea | Nymphalidae | Nymphalinae  | Melitaea Fabricius, 1807    | diamina (Lang, 1789)                       | 35.5 | L  | F  | O | M |
| Papilionoidea | Nymphalidae | Nymphalinae  | Melitaea Fabricius, 1807    | athalia (Rottemburg, 1775)                 | 35.5 | L  | F  | O | M |
| Papilionoidea | Nymphalidae | Limnitiinae  | Limnitis Fabricius, 1807    | populi (Linnaeus, 1758)                    | 70.0 | L  | W  | M | U |
| Papilionoidea | Nymphalidae | Limnitiinae  | Limnitis Fabricius, 1807    | camilla (Linnaeus, 1764)                   | 54.0 | L  | W  | M | U |
| Papilionoidea | Nymphalidae | Apaturinae   | Apatura Fabricius, 1807     | iris (Linnaeus, 1758)                      | 67.5 | L  | W  | M | U |
| Papilionoidea | Nymphalidae | Apaturinae   | Apatura Fabricius, 1807     | ilia (Denis & Schiffermüller, 1775)        | 68.0 | L  | W  | O | M |
| Papilionoidea | Nymphalidae | Satyrinae    | Pararge Hübner, 1819        | aegeria (Linnaeus, 1758)                   | 37.5 | LP | G  | O | M |
| Papilionoidea | Nymphalidae | Satyrinae    | Pararge Hübner, 1819        | maera (Linnaeus, 1758)                     | 45.5 | L  | G  | O | M |
| Papilionoidea | Nymphalidae | Satyrinae    | Pararge Hübner, 1819        | petropolitana (Fabricius, 1787)            | 37.0 | P  | G  | O | M |
| Papilionoidea | Nymphalidae | Satyrinae    | Pararge Hübner, 1819        | achine (Scopoli, 1763)                     | 43.5 | L  | G  | O | U |
| Papilionoidea | Nymphalidae | Satyrinae    | Coenonympha Hübner, 1819    | tullia (Müller, 1764)                      | 30.5 | L  | G  | O | U |
| Papilionoidea | Nymphalidae | Satyrinae    | Coenonympha Hübner, 1819    | glycerion (Borkhausen, 1788)               | 29.0 | L  | G  | O | M |
| Papilionoidea | Nymphalidae | Satyrinae    | Coenonympha Hübner, 1819    | pamphilus (Linnaeus, 1758)                 | 27.5 | L  | G  | O | M |
| Papilionoidea | Nymphalidae | Satyrinae    | Aphantopus Wallengren, 1853 | hyperantus (Linnaeus, 1758)                | 36.0 | L  | G  | O | U |
| Papilionoidea | Nymphalidae | Satyrinae    | Maniola Schrank, 1801       | jurtina (Linnaeus, 1758)                   | 41.5 | L  | G  | O | U |
| Papilionoidea | Nymphalidae | Satyrinae    | Maniola Schrank, 1801       | lycaon (Kühn, 1774)                        | 37.5 | L  | G  | O | U |
| Papilionoidea | Nymphalidae | Satyrinae    | Erebia Dalman, 1816         | ligea (Linnaeus, 1758)                     | 41.0 | EL | G  | O | U |
| Papilionoidea | Nymphalidae | Satyrinae    | Hipparchia Fabricius, 1807  | semele (Linnaeus, 1758)                    | 50.0 | L  | G  | O | U |
| Drepanoidea   | Drepanidae  | Drepaninae   | Falcaria Haworth, 1809      | lacertinaria (Linnaeus, 1758)              | 32.7 | P  | W  | O | M |
| Drepanoidea   | Drepanidae  | Drepaninae   | Drepana Schrank, 1802       | falcataria (Linnaeus, 1758)                | 34.3 | P  | W  | O | M |
| Drepanoidea   | Drepanidae  | Drepaninae   | Drepana Schrank, 1802       | curvatula (Borkhausen, 1790)               | 34.6 | P  | W  | O | M |
| Drepanoidea   | Drepanidae  | Thyatirinae  | Thyatira Ochsenheimer, 1816 | batis (Linnaeus, 1758)                     | 34.3 | P  | F  | M | M |

|                |               |                 |                                |   |       |    |      |   |   |
|----------------|---------------|-----------------|--------------------------------|---|-------|----|------|---|---|
| Drepanoidea    | Drepanidae    | Thyatirinae     | Habrosyne Hübner, 1821         | pyritoides (Hufnagel, 1766)             | 39.0  | P  | F    | M | M |
| Drepanoidea    | Drepanidae    | Thyatirinae     | Tethea Ochsenheimer, 1816      | ocularis (Linnaeus, 1767)               | 37.8  | P  | W    | M | M |
| Drepanoidea    | Drepanidae    | Thyatirinae     | Tethea Ochsenheimer, 1816      | or (Denis & Schiffermüller, 1775)       | 38.4  | P  | W    | O | M |
| Drepanoidea    | Drepanidae    | Thyatirinae     | Ochropacha Wallengren, 1871    | duplaris (Linnaeus, 1761)               | 32.5  | P  | W    | O | M |
| Drepanoidea    | Drepanidae    | Thyatirinae     | Achlya Billberg, 1820          | flavicornis (Linnaeus, 1758)            | 42.1  | AP | W    | M | U |
| Lasiocampoidea | Lasiocampidae | Poecilocampinae | Poecilocampa Stephens, 1828    | populi (Linnaeus, 1758)                 | 37.8  | E  | W    | P | U |
| Lasiocampoidea | Lasiocampidae | Poecilocampinae | Trichiura Stephens, 1828       | crataegi (Linnaeus, 1758)               | 33.0  | E  | W    | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Eriogaster Germar, 1811        | lanestris (Linnaeus, 1758)              | 37.8  | P  | W    | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Malacosoma Hübner, 1820        | neustria (Linnaeus, 1758)               | 33.8  | E  | W    | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Malacosoma Hübner, 1820        | castrense (Linnaeus, 1758)              | 32.5  | E  | F    | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Lasiocampa Schrank, 1820       | trifolii (Denis & Schiffermüller, 1775) | 47.3  | E  | F    | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Lasiocampa Schrank, 1820       | quercus (Linnaeus, 1758)                | 71.3  | L  | WH   | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Macrothylacia Rambur, 1866     | rubi (Linnaeus, 1758)                   | 51.8  | L  | WH   | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Dendrolimus Germar, 1811       | pini (Linnaeus, 1758)                   | 67.5  | L  | W(c) | O | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Euthrix Meigen, 1830           | potatoria (Linnaeus, 1758)              | 51.5  | L  | G    | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Cosmotriche Hübner, 1820       | lobulina (Denis & Schiffermüller, 1775) | 41.5  | L  | W(c) | O | M |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Phyllodesma Hübner, 1820       | ilicifolium (Linnaeus, 1758)            | 34.5  | P  | WH   | P | U |
| Lasiocampoidea | Lasiocampidae | Lasiocampinae   | Gastropacha Ochsenheimer, 1810 | quercifolia (Linnaeus, 1758)            | 62.0  | L  | W    | P | M |
| Bombycoidea    | Endromidae    | Endrominae      | Endromis Ochsenheimer, 1810    | versicolora (Linnaeus, 1758)            | 66.3  | P  | W    | P | U |
| Bombycoidea    | Lemoniidae    | Lemoniinae      | Lemonia Hübner, 1820           | dumi (Linnaeus, 1761)                   | 48.3  | E  | F    | O | U |
| Bombycoidea    | Saturniidae   | Agliinae        | Agliia Ochsenheimer, 1810      | tau (Linnaeus, 1758)                    | 70.3  | P  | W    | P | U |
| Bombycoidea    | Saturniidae   | Saturniinae     | Saturnia Schrank, 1802         | pavonia (Linnaeus, 1758)                | 55.8  | P  | WH   | P | U |
| Bombycoidea    | Sphingidae    | Smerinthinae    | Mimas Hübner, 1819             | tiliae (Linnaeus, 1758)                 | 73.0  | P  | W    | O | M |
| Bombycoidea    | Sphingidae    | Smerinthinae    | Smerinthus Latreille, 1802     | ocellatus (Linnaeus, 1758)              | 79.3  | P  | W    | P | M |
| Bombycoidea    | Sphingidae    | Smerinthinae    | Laothoe Fabricius, 1807        | populi (Linnaeus, 1758)                 | 78.5  | P  | W    | O | M |
| Bombycoidea    | Sphingidae    | Sphinginae      | Sphinx Linnaeus, 1758          | ligustri Linnaeus, 1758                 | 101.5 | P  | W    | O | M |
| Bombycoidea    | Sphingidae    | Sphinginae      | Sphinx Linnaeus, 1758          | pinastri Linnaeus, 1758                 | 80.5  | P  | W(c) | O | M |
| Bombycoidea    | Sphingidae    | Macroglossinae  | Hemaris Dalman, 1816           | tityrus (Linnaeus, 1758)                | 40.8  | P  | F    | P | M |
| Bombycoidea    | Sphingidae    | Macroglossinae  | Hemaris Dalman, 1816           | fuciformis (Linnaeus, 1758)             | 43.0  | P  | W    | O | M |
| Bombycoidea    | Sphingidae    | Macroglossinae  | Hyles Hübner, 1819             | gallii (Rottemburg, 1775)               | 71.0  | P  | F    | P | M |
| Bombycoidea    | Sphingidae    | Macroglossinae  | Deilephila Laspeyrés, 1809     | elpenor (Linnaeus, 1758)                | 60.3  | P  | F    | O | M |
| Bombycoidea    | Sphingidae    | Macroglossinae  | Deilephila Laspeyrés, 1809     | porcellus (Linnaeus, 1758)              | 46.0  | P  | F    | O | M |
| Geometroidea   | Geometridae   | Sterrhinae      | Idaea Treitschke, 1825         | ochrata (Scopoli, 1763)                 | 21.0  | L  | F    | P | U |
| Geometroidea   | Geometridae   | Sterrhinae      | Idaea Treitschke, 1825         | serpentata (Hufnagel, 1767)             | 18.5  | L  | F    | P | M |

|              |             |             |                              |  |      |   |    |   |   |
|--------------|-------------|-------------|------------------------------|--|------|---|----|---|---|
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | muricata (Hufnagel, 1767)                | 17.6 | L | F  | P | U |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | sylvestriaria (Hübner, 1799)             | 18.3 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | biselata (Hufnagel, 1767)                | 19.0 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | humiliata (Hufnagel, 1767)               | 17.5 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | seriata (Schrank, 1802)                  | 17.7 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | dimidiata (Hufnagel, 1767)               | 18.1 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | pallidata (Denis & Schiffermüller, 1775) | 19.0 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | emarginata (Linnaeus, 1758)              | 21.0 | L | WH | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | aversata (Linnaeus, 1758)                | 25.8 | L | WH | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | straminata (Borkhausen, 1794)            | 24.3 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Idaea Treitschke, 1825       | deversaria (Herrich-Schäffer, 1847)      | 22.6 | L | WH | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | immorata (Linnaeus, 1758)                | 25.5 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | corrivalaria (Kretschmar, 1862)          | 20.0 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | caricaria (Reutti, 1853)                 | 21.0 | L | F  | O | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | virgulata (Denis & Schiffermüller, 1775) | 20.3 | L | F  | O | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | ornata (Scopoli, 1763)                   | 23.0 | L | F  | O | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | decorata (Denis & Schiffermüller, 1775)  | 21.7 | L | F  | M | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | rubiginata (Hufnagel, 1767)              | 19.6 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | incanata (Linnaeus, 1758)                | 25.6 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | immutata (Linnaeus, 1758)                | 22.7 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | ternata (Schrank, 1802)                  | 24.2 | L | F  | O | U |
| Geometroidea | Geometridae | Sterrhinae  | Scopula Schrank, 1802        | floslactata (Haworth, 1809)              | 24.5 | L | WH | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Rhodostrophia Hübner, 1823   | vibicaria (Clerck, 1759)                 | 27.7 | L | F  | P | M |
| Geometroidea | Geometridae | Sterrhinae  | Timandra Duponchel, 1829     | comae Schmidt, 1931                      | 26.0 | L | F  | O | M |
| Geometroidea | Geometridae | Sterrhinae  | Cyclophora Hübner, 1822      | pendularia (Clerck, 1759)                | 24.6 | P | W  | O | M |
| Geometroidea | Geometridae | Sterrhinae  | Cyclophora Hübner, 1822      | annularia (Fabricius, 1775)              | 24.0 | P | W  | M | M |
| Geometroidea | Geometridae | Sterrhinae  | Cyclophora Hübner, 1822      | albipunctata (Hufnagel, 1767)            | 24.5 | P | W  | M | M |
| Geometroidea | Geometridae | Sterrhinae  | Cyclophora Hübner, 1822      | quercimontaria (Bastelberger, 1897)      | 24.9 | P | W  | M | M |
| Geometroidea | Geometridae | Sterrhinae  | Cyclophora Hübner, 1822      | punctaria (Linnaeus, 1758)               | 27.5 | P | W  | M | M |
| Geometroidea | Geometridae | Sterrhinae  | Lythria Hübner, 1823         | cruentaria (Hufnagel, 1767)              | 19.2 | P | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Phibalapteryx Stephens, 1829 | virgata (Hufnagel, 1767)                 | 18.6 | P | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Scotopteryx Hübner, 1825     | chenopodiata (Linnaeus, 1758)            | 30.2 | L | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Catarhoe Herbulot, 1951      | cuculata (Hufnagel, 1767)                | 24.7 | P | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Catarhoe Herbulot, 1951      | rubidata (Denis & Schiffermüller, 1775)  | 24.3 | P | F  | M | M |

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|--------------|-------------|-------------|-----------------------------|--|------|----|----|---|---|
| Geometroidea | Geometridae | Larentiinae | Camptogramma Stephens, 1831 | bilineatum (Linnaeus, 1758)                | 24.0 | L  | F  | P | M |
| Geometroidea | Geometridae | Larentiinae | Orthonama Hübner, 1825      | vittatum (Borkhausen, 1794)                | 22.3 | L  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Ochyria Hübner, 1825        | quadrifasiata (Clerck, 1759)               | 25.5 | L  | F  | P | M |
| Geometroidea | Geometridae | Larentiinae | Xanthorhoe Hübner, 1825     | fluctuata (Linnaeus, 1758)                 | 23.2 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Xanthorhoe Hübner, 1825     | montanata (Denis & Schiffermüller, 1775)   | 27.3 | L  | F  | P | M |
| Geometroidea | Geometridae | Larentiinae | Xanthorhoe Hübner, 1825     | spadicearia (Denis & Schiffermüller, 1775) | 21.1 | P  | F  | P | M |
| Geometroidea | Geometridae | Larentiinae | Xanthorhoe Hübner, 1825     | ferrugata (Clerck, 1759)                   | 21.6 | P  | F  | P | M |
| Geometroidea | Geometridae | Larentiinae | Xanthorhoe Hübner, 1825     | biriviata (Borkhausen, 1794)               | 22.3 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Xanthorhoe Hübner, 1825     | designata (Hufnagel, 1767)                 | 22.4 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Epirrhoe Hübner, 1825       | tristata (Linnaeus, 1758)                  | 22.1 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Epirrhoe Hübner, 1825       | hastulata (Hübner, 1792)                   | 19.4 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Epirrhoe Hübner, 1825       | galiata (Denis & Schiffermüller, 1775)     | 23.3 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Epirrhoe Hübner, 1825       | rivata (Hübner, 1813)                      | 26.5 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Epirrhoe Hübner, 1825       | alternata (Müller, 1764)                   | 23.4 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Euphyia Hübner, 1825        | biangulata (Haworth, 1809)                 | 27.8 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Euphyia Hübner, 1825        | unangulata (Haworth, 1809)                 | 24.4 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Anticlea Stephens, 1831     | badiata (Denis & Schiffermüller, 1775)     | 29.5 | AP | W  | M | U |
| Geometroidea | Geometridae | Larentiinae | Anticlea Stephens, 1831     | derivata (Denis & Schiffermüller, 1775)    | 28.3 | P  | W  | M | U |
| Geometroidea | Geometridae | Larentiinae | Mesoleuca Hübner, 1825      | albicillata (Linnaeus, 1758)               | 29.3 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Pelurga Hübner, 1825        | comitata (Linnaeus, 1758)                  | 27.9 | P  | F  | O | U |
| Geometroidea | Geometridae | Larentiinae | Larentia Treitschke, 1825   | clavaria (Haworth, 1809)                   | 33.5 | E  | F  | O | U |
| Geometroidea | Geometridae | Larentiinae | Entephria Hübner, 1825      | caesiata (Denis & Schiffermüller, 1775)    | 30.3 | L  | WH | P | U |
| Geometroidea | Geometridae | Larentiinae | Spargania Guenée, 1857      | luctuata (Denis & Schiffermüller, 1775)    | 26.0 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Lampropteryx Stephens, 1831 | suffumata (Denis & Schiffermüller, 1775)   | 27.2 | AP | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Ecliptopera Warren, 1894    | silaceata (Denis & Schiffermüller, 1775)   | 26.1 | P  | F  | O | M |
| Geometroidea | Geometridae | Larentiinae | Ecliptopera Warren, 1894    | capitata (Herrich-Schäffer, 1839)          | 24.4 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Eustroma Hübner, 1825       | reticulatum (Denis & Schiffermüller, 1775) | 25.4 | P  | F  | M | M |
| Geometroidea | Geometridae | Larentiinae | Eulithis Hübner, 1821       | prunata (Linnaeus, 1758)                   | 31.7 | E  | W  | M | U |
| Geometroidea | Geometridae | Larentiinae | Eulithis Hübner, 1821       | testata (Linnaeus, 1761)                   | 28.0 | E  | WH | P | U |
| Geometroidea | Geometridae | Larentiinae | Eulithis Hübner, 1821       | populata (Linnaeus, 1758)                  | 28.4 | E  | WH | P | U |
| Geometroidea | Geometridae | Larentiinae | Eulithis Hübner, 1821       | mellinata (Fabricius, 1787)                | 27.4 | E  | W  | M | U |
| Geometroidea | Geometridae | Larentiinae | Eulithis Hübner, 1821       | pyraliata (Denis & Schiffermüller, 1775)   | 28.1 | E  | F  | M | U |
| Geometroidea | Geometridae | Larentiinae | Cidaria Treitschke, 1825    | fulvata (Forster, 1771)                    | 24.3 | E  | W  | M | U |
| Geometroidea | Geometridae | Larentiinae | Chloroclysta Hübner, 1825   | siterata (Hufnagel, 1767)                  | 28.4 | A  | W  | P | U |

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|--------------|-------------|-------------|---------------------------|---|------|----|------|---|---|
| Geometroidea | Geometridae | Larentiinae | Chloroclysta Hübner, 1825 | miata (Linnaeus, 1758)                    | 30.8 | A  | WH   | P | U |
| Geometroidea | Geometridae | Larentiinae | Dysstroma Hübner, 1825    | citratum (Linnaeus, 1761)                 | 28.6 | E  | WH   | P | U |
| Geometroidea | Geometridae | Larentiinae | Dysstroma Hübner, 1825    | truncatum (Hufnagel, 1767)                | 30.4 | L  | WH   | P | M |
| Geometroidea | Geometridae | Larentiinae | Plemyria Hübner, 1825     | rubiginata (Denis & Schiffermüller, 1775) | 26.1 | E  | W    | P | M |
| Geometroidea | Geometridae | Larentiinae | Thera Stephens, 1831      | firmata (Hübner, 1822)                    | 27.4 | L  | W(c) | M | M |
| Geometroidea | Geometridae | Larentiinae | Thera Stephens, 1831      | variata (Denis & Schiffermüller, 1775)    | 25.7 | L  | W(c) | O | M |
| Geometroidea | Geometridae | Larentiinae | Thera Stephens, 1831      | obeliscata (Hübner, 1787)                 | 26.2 | L  | W(c) | M | M |
| Geometroidea | Geometridae | Larentiinae | Thera Stephens, 1831      | juniperata (Linnaeus, 1758)               | 22.3 | E  | W(c) | M | U |
| Geometroidea | Geometridae | Larentiinae | Electrophaes Prout, 1923  | corylata (Thunberg, 1792)                 | 25.4 | P  | W    | P | M |
| Geometroidea | Geometridae | Larentiinae | Cosmorhoe Hübner, 1825    | ocellata (Linnaeus, 1758)                 | 23.6 | L  | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Colostygia Hübner, 1825   | olivata (Denis & Schiffermüller, 1775)    | 23.6 | L  | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Colostygia Hübner, 1825   | pectinataria (Knoch, 1781)                | 23.1 | L  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Hydriomena Hübner, 1825   | furcata (Thunberg, 1784)                  | 27.2 | E  | WH   | P | U |
| Geometroidea | Geometridae | Larentiinae | Hydriomena Hübner, 1825   | impluviata (Denis & Schiffermüller, 1775) | 29.0 | P  | W    | O | M |
| Geometroidea | Geometridae | Larentiinae | Philereme Hübner, 1825    | vetulata (Denis & Schiffermüller, 1775)   | 26.3 | E  | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Philereme Hübner, 1825    | transversata (Hufnagel, 1767)             | 31.9 | E  | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Rheumaptera Hübner, 1822  | hastata (Linnaeus, 1758)                  | 30.2 | P  | W    | P | U |
| Geometroidea | Geometridae | Larentiinae | Rheumaptera Hübner, 1822  | cervinalis (Scopoli, 1763)                | 35.7 | AP | W    | M | M |
| Geometroidea | Geometridae | Larentiinae | Rheumaptera Hübner, 1822  | undulata (Linnaeus, 1758)                 | 29.4 | P  | WH   | O | U |
| Geometroidea | Geometridae | Larentiinae | Triphosa Stephens, 1829   | dubitata (Linnaeus, 1758)                 | 38.2 | A  | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Horisme Hübner, 1825      | tersata (Denis & Schiffermüller, 1775)    | 28.8 | P  | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Anticollix Prout, 1938    | sparsata (Treitschke, 1828)               | 22.1 | P  | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Operophtera Hübner, 1825  | brumata (Linnaeus, 1758)                  | 27.2 | E  | W    | P | U |
| Geometroidea | Geometridae | Larentiinae | Operophtera Hübner, 1825  | fagata (Scharfenberg, 1805)               | 31.8 | E  | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Epirrita Hübner, 1822     | dilutata (Denis & Schiffermüller, 1775)   | 35.9 | E  | W    | P | U |
| Geometroidea | Geometridae | Larentiinae | Epirrita Hübner, 1822     | christyi (Allen, 1906)                    | 33.1 | E  | W    | P | U |
| Geometroidea | Geometridae | Larentiinae | Epirrita Hübner, 1822     | autumnata (Borkhausen, 1794)              | 33.6 | E  | WH   | P | U |
| Geometroidea | Geometridae | Larentiinae | Asthena Hübner, 1825      | albulata (Hufnagel, 1767)                 | 18.0 | P  | W    | P | M |
| Geometroidea | Geometridae | Larentiinae | Asthena Hübner, 1825      | anseraria (Herrich-Schäffer, 1855)        | 19.0 | P  | W    | M | M |
| Geometroidea | Geometridae | Larentiinae | Hydrelia Hübner, 1825     | sylvata (Denis & Schiffermüller, 1775)    | 21.2 | P  | W    | P | M |
| Geometroidea | Geometridae | Larentiinae | Hydrelia Hübner, 1825     | flammeolaria (Hufnagel, 1767)             | 18.8 | P  | W    | O | M |
| Geometroidea | Geometridae | Larentiinae | Euchoeca Hübner, 1823     | nebulata (Scopoli, 1763)                  | 21.3 | P  | W    | M | M |
| Geometroidea | Geometridae | Larentiinae | Venusia Curtis, 1839      | blomeri (Curtis, 1832)                    | 19.3 | P  | W    | M | M |
| Geometroidea | Geometridae | Larentiinae | Mesotype Hübner, 1825     | didymata (Linnaeus, 1758)                 | 23.6 | E  | WH   | P | U |

|              |             |             |                            |  |      |   |      |   |   |
|--------------|-------------|-------------|----------------------------|--|------|---|------|---|---|
| Geometroidea | Geometridae | Larentiinae | Mesotype Hübner, 1825      | paralleloineata (Retzius, 1783)            | 24.7 | E | WH   | P | U |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | affinitatum (Stephens, 1831)               | 24.2 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | alchemillatum (Linnaeus, 1758)             | 19.2 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | hydratum (Treitschke, 1829)                | 19.3 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | bifaciatum (Haworth, 1809)                 | 18.8 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | minoratum (Treitschke, 1828)               | 16.9 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | blandiatum (Denis & Schiffermüller, 1775)  | 18.6 | P | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | albulatum (Denis & Schiffermüller, 1775)   | 19.1 | P | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Perizoma Hübner, 1825      | flavofasciatum (Thunberg, 1792)            | 23.4 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Martania Mironov, 2000     | taeniata (Stephens, 1831)                  | 21.0 | L | .    | . | U |
| Geometroidea | Geometridae | Larentiinae | Gagitodes Warren, 1893     | sagittatus (Fabricius, 1787)               | 25.6 | P | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Gymnoscelis Mabille, 1868  | ruffifasciata (Haworth, 1809)              | 15.0 | P | WH   | P | M |
| Geometroidea | Geometridae | Larentiinae | Chloroclystis Hübner, 1825 | v-ata (Haworth, 1809)                      | 13.8 | P | WH   | P | M |
| Geometroidea | Geometridae | Larentiinae | Pasiphila Meyrick, 1883    | chloerata (Mabille, 1870)                  | 18.3 | E | W    | M | U |
| Geometroidea | Geometridae | Larentiinae | Pasiphila Meyrick, 1883    | rectangulata (Linnaeus, 1758)              | 18.7 | E | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Pasiphila Meyrick, 1883    | debiliata (Hübner, 1817)                   | 17.7 | E | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | tenuiata (Hübner, 1813)                    | 16.2 | E | W    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | inturbata (Hübner, 1817)                   | 16.0 | E | W    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | immundata (Lienig & Zeller, 1846)          | 18.9 | P | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | plumbeolata (Haworth, 1809)                | 14.8 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | abietaria (Goeze, 1781)                    | 20.9 | P | W(c) | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | analoga Diakonoff, 1926                    | 17.6 | P | W(c) | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | linariata (Denis & Schiffermüller, 1775)   | 15.9 | P | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | irriguata (Hübner, 1813)                   | 19.0 | P | W    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | exiguata (Hübner, 1813)                    | 18.2 | P | W    | P | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | valerianata (Hübner, 1813)                 | 15.1 | P | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | pygmaeata (Hübner, 1799)                   | 14.8 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | venosata (Fabricius, 1787)                 | 20.4 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | egenaria Herrich-Schäffer, 1848            | 20.3 | P | W    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | centaureata (Denis & Schiffermüller, 1775) | 17.6 | P | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | actaeata Walderdorff, 1869                 | 21.9 | P | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | selinata Herrich-Schäffer, 1861            | 18.8 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | tresignaria Herrich-Schäffer, 1848         | 17.6 | P | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825    | intricata (Zetterstedt, 1839)              | 18.7 | P | W(c) | M | M |

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|--------------|-------------|-------------|-------------------------------|---|------|----|------|---|---|
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | cauchiata (Duponchel, 1831)               | 18.5 | P  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | satyrata (Hübner, 1813)                   | 19.0 | P  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | expallidata Doubleday, 1856               | 20.2 | P  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | absinthiata (Clerck, 1759)                | 19.9 | P  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | assimilata Doubleday, 1856                | 17.3 | P  | WH   | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | tripunctaria Herrich-Schäffer, 1852       | 18.3 | P  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | vulgata (Haworth, 1809)                   | 17.2 | P  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | denotata (Hübner, 1813)                   | 19.0 | P  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | subfuscata (Haworth, 1809)                | 18.0 | P  | F    | P | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | icterata (de Villers, 1789)               | 20.1 | P  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | succenturiata (Linnaeus, 1758)            | 22.1 | P  | F    | P | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | orphnata W. Petersen, 1909                | 18.7 | P  | F    | P | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | subumbrata (Denis & Schiffermüller, 1775) | 17.0 | P  | F    | P | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | millefoliata Rössler, 1866                | 21.5 | P  | F    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | simpliciata (Haworth, 1809)               | 20.8 | P  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | distinctaria Herrich-Schäffer, 1848       | 18.5 | P  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | sinuosaria (Eversmann, 1848)              | 20.3 | P  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | indigata (Hübner, 1813)                   | 16.0 | P  | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | pimpinellata (Hübner, 1813)               | 19.8 | P  | F    | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | nanata (Hübner, 1813)                     | 17.4 | P  | F    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | ochridata Pinker, 1968                    | 21.5 | P  | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | innotata (Hufnagel, 1767)                 | 20.0 | P  | WH   | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | virgaureata Doubleday, 1861               | 17.4 | AP | WH   | P | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | dodoneata Guenée, 1858                    | 17.1 | P  | W    | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | pusillata (Denis & Schiffermüller, 1775)  | 18.7 | E  | W(c) | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | lariciata (Freyer, 1841)                  | 18.8 | P  | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | tantillaria Boisduval, 1840               | 17.4 | P  | W    | O | M |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | conterminata (Lienig & Zeller, 1846)      | 15.1 | P  | W(c) | M | U |
| Geometroidea | Geometridae | Larentiinae | Eupithecia Curtis, 1825       | lanceata (Hübner, 1825)                   | 18.4 | AP | W    | O | U |
| Geometroidea | Geometridae | Larentiinae | Aplocera Stephens, 1827       | praeformata (Hübner, 1826)                | 38.4 | L  | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Aplocera Stephens, 1827       | plagiata (Linnaeus, 1758)                 | 33.8 | L  | F    | M | M |
| Geometroidea | Geometridae | Larentiinae | Odezia Boisduval, 1840        | atrata (Linnaeus, 1758)                   | 24.8 | E  | F    | O | U |
| Geometroidea | Geometridae | Larentiinae | Lobophora Curtis, 1825        | halterata (Hufnagel, 1767)                | 24.2 | P  | W    | O | M |
| Geometroidea | Geometridae | Larentiinae | Pterapherapteryx Curtis, 1825 | sexalata (Retzius, 1783)                  | 20.4 | P  | W    | O | M |

|              |             |              |                             |  |      |    |    |   |   |
|--------------|-------------|--------------|-----------------------------|--|------|----|----|---|---|
| Geometroidea | Geometridae | Larentiinae  | Trichopteryx Hübner, 1825   | polycommata (Denis & Schiffermüller, 1775) | 29.6 | AP | W  | O | U |
| Geometroidea | Geometridae | Larentiinae  | Trichopteryx Hübner, 1825   | carpinata (Borkhausen, 1794)               | 29.4 | AP | W  | O | U |
| Geometroidea | Geometridae | Larentiinae  | Acasis Duponchel, 1845      | viretata (Hübner, 1799)                    | 22.7 | P  | W  | P | M |
| Geometroidea | Geometridae | Geometrinae  | Geometra Linnaeus, 1758     | papilionaria (Linnaeus, 1758)              | 46.6 | L  | W  | O | U |
| Geometroidea | Geometridae | Geometrinae  | Thetidia Boisduval, 1840    | smaragdaria (Fabricius, 1787)              | 29.6 | L  | F  | O | M |
| Geometroidea | Geometridae | Geometrinae  | Comibaena Hübner, 1823      | bajularia (Denis & Schiffermüller, 1775)   | 27.0 | L  | W  | M | M |
| Geometroidea | Geometridae | Geometrinae  | Hemithea Duponchel, 1829    | aestivaria (Hübner, 1799)                  | 28.1 | L  | W  | P | M |
| Geometroidea | Geometridae | Geometrinae  | Chlorissa Stephens, 1831    | viridata (Linnaeus, 1758)                  | 18.9 | P  | F  | P | M |
| Geometroidea | Geometridae | Geometrinae  | Thalera Hübner, 1823        | fimbrialis (Scopoli, 1763)                 | 28.3 | L  | F  | P | M |
| Geometroidea | Geometridae | Geometrinae  | Jodis Hübner, 1823          | lactearia (Linnaeus, 1758)                 | 22.2 | P  | W  | P | M |
| Geometroidea | Geometridae | Archiearinae | Archiearis Hübner, 1823     | parthenias (Linnaeus, 1761)                | 36.5 | AP | W  | O | U |
| Geometroidea | Geometridae | Archiearinae | Archiearis Hübner, 1823     | notha (Hübner, 1803)                       | 32.2 | AP | W  | O | U |
| Geometroidea | Geometridae | Ennominae    | Odontopera Stephens, 1831   | bidentata (Clerck, 1759)                   | 40.3 | P  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Cepphis Hübner, 1823        | advenaria (Hübner, 1790)                   | 26.2 | P  | WH | P | M |
| Geometroidea | Geometridae | Ennominae    | Plagodis Hübner, 1823       | pulveraria (Linnaeus, 1758)                | 32.3 | P  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Plagodis Hübner, 1823       | dolabraria (Linnaeus, 1767)                | 31.8 | P  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Ourapteryx Leach, 1814      | sambucaria (Linnaeus, 1758)                | 48.4 | L  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Opisthograptis Hübner, 1823 | luteolata (Linnaeus, 1758)                 | 35.0 | P  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Pseudopanthera Hübner, 1823 | macularia (Linnaeus, 1758)                 | 24.6 | P  | F  | O | U |
| Geometroidea | Geometridae | Ennominae    | Epione Duponchel, 1829      | repandaria (Hufnagel, 1767)                | 28.3 | E  | W  | O | M |
| Geometroidea | Geometridae | Ennominae    | Epione Duponchel, 1829      | vespertina (Linnaeus, 1767)                | 26.6 | E  | W  | O | U |
| Geometroidea | Geometridae | Ennominae    | Angerona Duponchel, 1829    | prunaria (Linnaeus, 1758)                  | 41.9 | L  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Ennomos Treitschke, 1825    | autumnarius (Werneburg, 1859)              | 46.2 | E  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Ennomos Treitschke, 1825    | alniarius (Linnaeus, 1758)                 | 37.9 | E  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Ennomos Treitschke, 1825    | fuscantarius (Haworth, 1809)               | 37.1 | E  | W  | O | U |
| Geometroidea | Geometridae | Ennominae    | Ennomos Treitschke, 1825    | erosarius (Denis & Schiffermüller, 1775)   | 37.0 | E  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Apeira Gistel, 1848         | syringaria (Linnaeus, 1758)                | 37.7 | L  | W  | O | M |
| Geometroidea | Geometridae | Ennominae    | Selenia Hübner, 1823        | dentaria (Fabricius, 1775)                 | 41.8 | AP | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Selenia Hübner, 1823        | lunularia (Hübner, 1788)                   | 38.8 | P  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Selenia Hübner, 1823        | tetralunaria (Hufnagel, 1767)              | 42.7 | P  | W  | P | M |
| Geometroidea | Geometridae | Ennominae    | Crocallis Treitschke, 1825  | elinguaria (Linnaeus, 1758)                | 37.9 | E  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Colotois Hübner, 1823       | pennaria (Linnaeus, 1761)                  | 42.7 | E  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Abraxas Leach, 1815         | grossulariatus (Linnaeus, 1758)            | 38.7 | L  | W  | P | U |
| Geometroidea | Geometridae | Ennominae    | Abraxas Leach, 1815         | sylvatus (Scopoli, 1763)                   | 36.8 | P  | W  | P | M |

|              |             |           |                            |  |      |    |      |   |   |
|--------------|-------------|-----------|----------------------------|--|------|----|------|---|---|
| Geometroidea | Geometridae | Ennominae | Ligdia Guenée, 1858        | adustata (Denis & Schiffermüller, 1775)      | 24.5 | P  | W    | M | M |
| Geometroidea | Geometridae | Ennominae | Lomaspilis Hübner, 1825    | marginata (Linnaeus, 1758)                   | 23.9 | P  | W    | O | M |
| Geometroidea | Geometridae | Ennominae | Lomaspilis Hübner, 1825    | opis Butler, 1878                            | 22.5 | P  | W    | M | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | notata (Linnaeus, 1758)                      | 28.1 | P  | W    | P | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | alternata (Denis & Schiffermüller, 1775)     | 25.1 | P  | W    | P | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | signaria (Hübner, 1809)                      | 26.3 | P  | W(c) | O | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | liturata (Clerck, 1759)                      | 27.7 | P  | W(c) | O | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | artesiaria (Denis & Schiffermüller, 1775)    | 25.4 | E  | W    | M | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | wauaria (Linnaeus, 1758)                     | 28.7 | E  | W    | M | M |
| Geometroidea | Geometridae | Ennominae | Macaria Curtis, 1826       | brunneata (Thunberg, 1784)                   | 23.2 | E  | F    | O | U |
| Geometroidea | Geometridae | Ennominae | Chiasmia Hübner, 1823      | clathrata (Linnaeus, 1758)                   | 23.1 | P  | F    | P | M |
| Geometroidea | Geometridae | Ennominae | Bupalus Leach, 1815        | piniarius (Linnaeus, 1758)                   | 33.6 | P  | W(c) | M | U |
| Geometroidea | Geometridae | Ennominae | Peribatodes Wehrli, 1943   | secundarius (Denis & Schiffermüller, 1775)   | 35.5 | L  | W(c) | O | M |
| Geometroidea | Geometridae | Ennominae | Cleora Curtis, 1825        | cinctaria (Denis & Schiffermüller, 1775)     | 31.2 | AP | WH   | P | M |
| Geometroidea | Geometridae | Ennominae | Deileptenia Hübner, 1825   | ribeata (Clerck, 1759)                       | 40.5 | L  | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Alcis Curtis, 1826         | repandatus (Linnaeus, 1758)                  | 37.4 | L  | WH   | P | M |
| Geometroidea | Geometridae | Ennominae | Alcis Curtis, 1826         | jubatus (Thunberg, 1788)                     | 24.2 | L  | L    | O | U |
| Geometroidea | Geometridae | Ennominae | Arichanna Moore, 1868      | melanaria (Linnaeus, 1758)                   | 36.9 | L  | F    | O | U |
| Geometroidea | Geometridae | Ennominae | Hypomecis Hübner, 1821     | roboraria (Denis & Schiffermüller, 1775)     | 51.4 | L  | W    | P | M |
| Geometroidea | Geometridae | Ennominae | Hypomecis Hübner, 1821     | punctinalis (Scopoli, 1763)                  | 41.4 | P  | W    | P | M |
| Geometroidea | Geometridae | Ennominae | Ectropis Hübner, 1825      | crepuscularia (Denis & Schiffermüller, 1775) | 35.8 | AP | WH   | P | M |
| Geometroidea | Geometridae | Ennominae | Paradarisa Warren, 1897    | consonaria (Hübner, 1799)                    | 33.0 | AP | W    | P | M |
| Geometroidea | Geometridae | Ennominae | Parectropis Sato, 1980     | similaria (Hufnagel, 1767)                   | 31.0 | P  | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Aethalura McDunnough, 1920 | punctulata (Denis & Schiffermüller, 1775)    | 28.3 | AP | W    | O | M |
| Geometroidea | Geometridae | Ennominae | Biston Leach, 1815         | stratararius (Hufnagel, 1767)                | 46.5 | P  | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Biston Leach, 1815         | betularius (Linnaeus, 1758)                  | 44.8 | P  | WH   | P | M |
| Geometroidea | Geometridae | Ennominae | Lycia Hübner, 1825         | hirtaria (Clerck, 1759)                      | 45.1 | AP | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Phigalia Duponchel, 1829   | pilosaria (Denis & Schiffermüller, 1775)     | 46.3 | AP | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Agriopis Hübner, 1825      | aurantiaria (Hübner, 1799)                   | 34.8 | E  | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Agriopis Hübner, 1825      | marginaria (Fabricius, 1776)                 | 34.5 | AP | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Erannis Hübner, 1825       | defoliaria (Clerck, 1759)                    | 38.2 | E  | W    | P | U |
| Geometroidea | Geometridae | Ennominae | Hypoxystis Prout, 1915     | pluviaria (Fabricius, 1789)                  | 29.8 | L  | F    | P | U |
| Geometroidea | Geometridae | Ennominae | Charissa Curtis, 1826      | obscurata (Denis & Schiffermüller, 1775)     | 30.5 | L  | F    | P | U |
| Geometroidea | Geometridae | Ennominae | Cleorodes Warren, 1894     | lichenarius (Hufnagel, 1767)                 | 27.1 | L  | L    | . | M |

|              |              |                |                              |   |      |   |      |   |   |
|--------------|--------------|----------------|------------------------------|---|------|---|------|---|---|
| Geometroidea | Geometridae  | Ennominae      | Ematurga Lederer, 1853       | atomaria (Linnaeus, 1758)                 | 27.0 | P | F    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Perconia Hübner, 1823        | strigillaria (Hübner, 1787)               | 30.3 | L | F    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Siona Duponchel, 1829        | lineata (Scopoli, 1763)                   | 37.5 | L | F    | P | U |
| Geometroidea | Geometridae  | Ennominae      | Aspitates Treitschke, 1825   | gilvaria (Denis & Schiffermüller, 1775)   | 29.3 | L | F    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Petrophora Hübner, 1811      | chlorosata (Scopoli, 1763)                | 29.7 | P | F    | O | M |
| Geometroidea | Geometridae  | Ennominae      | Campaea Lamarck, 1816        | margaritata (Linnaeus, 1761)              | 41.7 | L | W    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Hylaea Hübner, 1822          | fasciaria (Linnaeus, 1758)                | 34.9 | L | W(c) | O | M |
| Geometroidea | Geometridae  | Ennominae      | Cabera Treitschke, 1825      | pusaria (Linnaeus, 1758)                  | 30.5 | P | W    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Cabera Treitschke, 1825      | exanthemata (Scopoli, 1763)               | 29.3 | P | W    | O | M |
| Geometroidea | Geometridae  | Ennominae      | Lomographa Hübner, 1825      | bimaculata (Fabricius, 1775)              | 26.7 | P | W    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Lomographa Hübner, 1825      | temerata (Denis & Schiffermüller, 1775)   | 25.9 | P | W    | P | M |
| Geometroidea | Geometridae  | Ennominae      | Stegania Guenée, 1845        | cararia (Hübner, 1790)                    | 21.5 | P | W    | M | M |
| Noctuoidea   | Notodontidae | Pygaerinae     | Clostera Samouelle, 1819     | curtula (Linnaeus, 1758)                  | 34.0 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Pygaerinae     | Clostera Samouelle, 1819     | anachoreta (Denis & Schiffermüller, 1775) | 35.0 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Pygaerinae     | Clostera Samouelle, 1819     | anastomosis (Linnaeus, 1758)              | 37.3 | L | W    | O | M |
| Noctuoidea   | Notodontidae | Pygaerinae     | Clostera Samouelle, 1819     | pigra (Hufnagel, 1766)                    | 25.0 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Notodonta Ochsenheimer, 1810 | torva (Hübner, 1803)                      | 47.5 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Notodonta Ochsenheimer, 1810 | dromedarius (Linnaeus, 1767)              | 41.3 | P | W    | P | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Notodonta Ochsenheimer, 1810 | tritophus (Denis & Schiffermüller, 1775)  | 50.5 | P | W    | M | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Notodonta Ochsenheimer, 1810 | ziczac (Linnaeus, 1758)                   | 40.8 | P | W    | P | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Pterostoma Germar, 1812      | palpinum (Clerck, 1759)                   | 46.3 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Ptilodon Hübner, 1822        | capucinus (Linnaeus, 1758)                | 39.3 | P | W    | P | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Pheosia Hübner, 1819         | gnoma (Fabricius, 1776)                   | 43.5 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Pheosia Hübner, 1819         | tremula (Clerck, 1759)                    | 46.8 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Ptilophora Stephens, 1828    | plumigera (Denis & Schiffermüller, 1775)  | 36.8 | E | W    | O | U |
| Noctuoidea   | Notodontidae | Notodontinae   | Gluphisia Boisduval, 1828    | crenata (Esper, 1785)                     | 30.8 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Furcula Lamarck, 1816        | bicuspis (Borkhausen, 1790)               | 35.3 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Furcula Lamarck, 1816        | furcula (Clerck, 1759)                    | 31.5 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Furcula Lamarck, 1816        | bifida (Brahm, 1787)                      | 38.5 | P | W    | O | M |
| Noctuoidea   | Notodontidae | Notodontinae   | Cerura Schrank, 1802         | vinula (Linnaeus, 1758)                   | 62.3 | P | W    | O | U |
| Noctuoidea   | Notodontidae | Notodontinae   | Cerura Schrank, 1802         | erminea (Esper, 1783)                     | 60.0 | P | W    | O | U |
| Noctuoidea   | Notodontidae | Phalerinae     | Phalera Hübner, 1819         | bucephala (Linnaeus, 1758)                | 54.8 | P | W    | P | M |
| Noctuoidea   | Notodontidae | Heterocampinae | Stauropus Germar, 1812       | fagi (Linnaeus, 1758)                     | 58.3 | P | W    | P | M |
| Noctuoidea   | Nolidae      | Nolinae        | Meganola Dyar, 1898          | strigula (Denis & Schiffermüller, 1775)   | 19.8 | L | W    | O | M |

|            |          |               |                             |                                       |      |   |    |   |   |
|------------|----------|---------------|-----------------------------|---------------------------------------|------|---|----|---|---|
| Noctuoidea | Nolidae  | Nolinae       | Meganola Dyar, 1898         | albula (Denis & Schiffermüller, 1775) | 19.9 | L | F  | P | M |
| Noctuoidea | Nolidae  | Nolinae       | Nola Leach, 1815            | cucullatella (Linnaeus, 1758)         | 19.0 | L | W  | O | M |
| Noctuoidea | Nolidae  | Nolinae       | Nola Leach, 1815            | confusalis (Herrich-Schäffer, 1847)   | 18.3 | P | W  | P | M |
| Noctuoidea | Nolidae  | Nolinae       | Nola Leach, 1815            | aerugula (Hübner, 1793)               | 17.1 | L | WH | P | M |
| Noctuoidea | Nolidae  | Chloephorinae | Bena Billberg, 1820         | bicolorana (Fuessly, 1775)            | 43.4 | L | W  | M | M |
| Noctuoidea | Nolidae  | Chloephorinae | Pseudoips Hübner, 1822      | prasinanus (Linnaeus, 1758)           | 35.5 | P | W  | O | M |
| Noctuoidea | Nolidae  | Chloephorinae | Nycteola Hübner, 1822       | revayana (Scopoli, 1772)              | 23.3 | A | W  | M | M |
| Noctuoidea | Nolidae  | Chloephorinae | Nycteola Hübner, 1822       | degenerana (Hübner, 1799)             | 25.5 | A | W  | M | M |
| Noctuoidea | Nolidae  | Chloephorinae | Earias Hübner, 1825         | clorana (Linnaeus, 1761)              | 21.1 | P | W  | M | M |
| Noctuoidea | Erebidae | Lymantriinae  | Arctornis Germar, 1810      | l-nigrum (Müller, 1764)               | 47.0 | L | W  | P | M |
| Noctuoidea | Erebidae | Lymantriinae  | Leucoma Hübner, 1822        | salicis (Linnaeus, 1758)              | 45.3 | L | W  | O | M |
| Noctuoidea | Erebidae | Lymantriinae  | Lymantria Hübner, 1819      | monacha (Linnaeus, 1758)              | 43.3 | E | W  | P | U |
| Noctuoidea | Erebidae | Lymantriinae  | Euproctis Hübner, 1819      | similis (Fuessly, 1775)               | 33.5 | L | W  | P | M |
| Noctuoidea | Erebidae | Lymantriinae  | Calliteara Butler, 1881     | pudibunda (Linnaeus, 1758)            | 47.6 | P | W  | P | M |
| Noctuoidea | Erebidae | Lymantriinae  | Gynaephora Hübner, 1822     | selenitica (Esper, 1783)              | 31.9 | L | WH | P | U |
| Noctuoidea | Erebidae | Lymantriinae  | Gynaephora Hübner, 1822     | fascelina (Linnaeus, 1758)            | 41.1 | L | WH | P | M |
| Noctuoidea | Erebidae | Lymantriinae  | Orgyia Ochseneheimer, 1810  | recens (Hübner, 1819)                 | 30.5 | L | WH | P | M |
| Noctuoidea | Erebidae | Lymantriinae  | Orgyia Ochseneheimer, 1810  | antiqua (Linnaeus, 1758)              | 27.5 | E | WH | P | M |
| Noctuoidea | Erebidae | Lymantriinae  | Orgyia Ochseneheimer, 1810  | antiquoides (Hübner, 1822)            | 25.0 | E | WH | P | U |
| Noctuoidea | Erebidae | Arctiinae     | Spilarctia Butler, 1875     | lutea (Hufnagel, 1766)                | 36.5 | P | WH | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Spilosoma Curtis, 1825      | lubricipedum (Linnaeus, 1758)         | 38.6 | P | WH | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Spilosoma Curtis, 1825      | urticae (Esper, 1789)                 | 37.5 | P | F  | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Diaphora Stephens, 1827     | mendica (Clerck, 1759)                | 30.4 | P | WH | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Diacrisia Hübner, 1819      | sannio (Linnaeus, 1758)               | 38.1 | L | WH | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Rhyparia Hübner, 1820       | purpurata (Linnaeus, 1758)            | 43.8 | L | WH | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Phragmatobia Stephens, 1828 | fuliginosa (Linnaeus, 1758)           | 31.3 | L | WH | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Parasemia Hübner, 1820      | plantaginis (Linnaeus, 1758)          | 34.3 | L | F  | P | U |
| Noctuoidea | Erebidae | Arctiinae     | Arctia Schrank, 1802        | caja (Linnaeus, 1758)                 | 56.9 | L | WH | P | U |
| Noctuoidea | Erebidae | Arctiinae     | Hyphoraia Hübner, 1820      | aulica (Linnaeus, 1758)               | 37.4 | L | F  | P | U |
| Noctuoidea | Erebidae | Arctiinae     | Callimorpha Latreille, 1809 | dominula (Linnaeus, 1758)             | 49.5 | L | WH | P | U |
| Noctuoidea | Erebidae | Arctiinae     | Tyria Hübner, 1819          | jacobaeae (Linnaeus, 1758)            | 37.3 | P | F  | O | U |
| Noctuoidea | Erebidae | Arctiinae     | Coscinia Hübner, 1819       | cribraria (Linnaeus, 1758)            | 34.1 | L | F  | P | M |
| Noctuoidea | Erebidae | Arctiinae     | Miltochrista Hübner, 1819   | miniata (Forster, 1771)               | 24.9 | L | L  | P | U |
| Noctuoidea | Erebidae | Arctiinae     | Nudaria Haworth, 1809       | mundana (Linnaeus, 1761)              | 20.0 | L | L  | P | U |

|            |           |                  |                             |   |      |   |   |   |   |
|------------|-----------|------------------|-----------------------------|---|------|---|---|---|---|
| Noctuoidea | Erebidae  | Arctiinae        | Thumatha Walker, 1866       | senex (Hübner, 1808)                      | 17.4 | L | L | P | M |
| Noctuoidea | Erebidae  | Arctiinae        | Cybosia Hübner, 1819        | mesomella (Linnaeus, 1758)                | 28.3 | L | L | P | U |
| Noctuoidea | Erebidae  | Arctiinae        | Pelosia Hübner, 1819        | muscerda (Hufnagel, 1766)                 | 26.5 | L | L | P | M |
| Noctuoidea | Erebidae  | Arctiinae        | Lithosia Fabricius, 1798    | quadra (Linnaeus, 1758)                   | 44.8 | L | L | . | U |
| Noctuoidea | Erebidae  | Arctiinae        | Atolmis Hübner, 1819        | rubricollis (Linnaeus, 1758)              | 32.0 | P | L | . | U |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | sororcula (Hufnagel, 1766)                | 28.5 | P | L | . | M |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | griseolum (Hübner, 1803)                  | 32.3 | L | L | . | U |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | pygmaeolum (Doubleday, 1847)              | 24.3 | L | L | . | M |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | lutarellum (Linnaeus, 1758)               | 25.4 | L | L | . | U |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | complanum (Linnaeus, 1758)                | 32.9 | L | L | . | U |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | depressum (Esper, 1787)                   | 29.0 | L | L | . | M |
| Noctuoidea | Erebidae  | Arctiinae        | Eilema Hübner, 1819         | lurideolum (Zincken, 1817)                | 30.6 | L | L | . | U |
| Noctuoidea | Erebidae  | Arctiinae        | Setina Schrank, 1802        | irrorella (Linnaeus, 1758)                | 28.0 | L | L | . | M |
| Noctuoidea | Noctuidae | Scoliopteryginae | Scoliopteryx Germar, 1811   | libatrix (Linnaeus, 1758)                 | 45.1 | A | W | O | M |
| Noctuoidea | Noctuidae | Rivulinae        | Rivula Guenée, 1845         | sericealis (Scopoli, 1763)                | 21.9 | L | G | O | M |
| Noctuoidea | Noctuidae | Hypeninae        | Hypena Schrank, 1802        | proboscidalis (Linnaeus, 1758)            | 35.1 | L | F | O | M |
| Noctuoidea | Noctuidae | Hypeninae        | Hypena Schrank, 1802        | rostralis (Linnaeus, 1758)                | 27.2 | A | F | O | M |
| Noctuoidea | Noctuidae | Hypeninae        | Hypena Schrank, 1802        | crassalis (Fabricius, 1787)               | 28.6 | P | F | O | M |
| Noctuoidea | Noctuidae | Herminiinae      | Paracolax Hübner, 1825      | tristalis (Fabricius, 1794)               | 27.4 | L | W | O | M |
| Noctuoidea | Noctuidae | Herminiinae      | Macrochilo Hübner, 1825     | cribrumalis (Hübner, 1793)                | 25.5 | L | G | O | M |
| Noctuoidea | Noctuidae | Herminiinae      | Herminia Latreille, 1802    | tarsipennalis Treitschke, 1835            | 29.3 | L | W | P | M |
| Noctuoidea | Noctuidae | Herminiinae      | Herminia Latreille, 1802    | tarsicrinalis (Knoch, 1782)               | 27.0 | L | W | P | M |
| Noctuoidea | Noctuidae | Herminiinae      | Herminia Latreille, 1802    | grisealis (Denis & Schiffermüller, 1775)  | 25.3 | P | W | P | M |
| Noctuoidea | Noctuidae | Herminiinae      | Polypogon Schrank, 1802     | tentacularius (Linnaeus, 1758)            | 25.3 | L | F | P | M |
| Noctuoidea | Noctuidae | Herminiinae      | Pechipogo Hübner, 1825      | strigilata (Linnaeus, 1758)               | 28.5 | L | W | P | M |
| Noctuoidea | Noctuidae | Herminiinae      | Zanclognatha Lederer, 1857  | lunalis (Scopoli, 1763)                   | 28.9 | L | W | P | M |
| Noctuoidea | Noctuidae | Calpinae         | Calyptra Ochsenheimer, 1816 | thalictri (Borkhausen, 1790)              | 42.5 | L | F | M | U |
| Noctuoidea | Noctuidae | Hypenodinae      | Hypenodes Doubleday, 1850   | humidalis Doubleday, 1850                 | 14.7 | L | G | O | M |
| Noctuoidea | Noctuidae | Hypenodinae      | Schrankia Hübner, 1825      | costaestrigalis (Stephens, 1834)          | 19.9 | L | F | P | M |
| Noctuoidea | Noctuidae | Boletobiinae     | Parascotia Hübner, 1825     | fuliginaria (Linnaeus, 1761)              | 22.6 | L | L | . | U |
| Noctuoidea | Noctuidae | Boletobiinae     | Phytometra Haworth, 1809    | viridaria (Clerck, 1759)                  | 19.0 | P | F | O | M |
| Noctuoidea | Noctuidae | Boletobiinae     | Colobochoyla Hübner, 1825   | salicalis (Denis & Schiffermüller, 1775)  | 25.7 | P | W | O | M |
| Noctuoidea | Noctuidae | Boletobiinae     | Laspeyria Germar, 1811      | flexula (Denis & Schiffermüller, 1775)    | 25.6 | L | L | . | M |
| Noctuoidea | Noctuidae | Boletobiinae     | Trisateles Tams, 1939       | emortualis (Denis & Schiffermüller, 1775) | 26.3 | P | W | O | M |

|            |           |              |                              |  |      |   |      |   |   |
|------------|-----------|--------------|------------------------------|--|------|---|------|---|---|
| Noctuoidea | Noctuidae | Toxocampinae | Lygephila Billberg, 1820     | pastinum (Treitschke, 1826)                | 39.6 | L | F    | O | M |
| Noctuoidea | Noctuidae | Toxocampinae | Lygephila Billberg, 1820     | viciae (Hübner, 1822)                      | 36.8 | P | F    | M | M |
| Noctuoidea | Noctuidae | Toxocampinae | Lygephila Billberg, 1820     | cracca (Denis & Schiffermüller, 1775)      | 38.9 | E | F    | O | M |
| Noctuoidea | Noctuidae | Erebinae     | Catocala Schrank, 1802       | sponsa (Linnaeus, 1767)                    | 65.3 | E | W    | M | U |
| Noctuoidea | Noctuidae | Erebinae     | Catocala Schrank, 1802       | fraxini (Linnaeus, 1758)                   | 91.0 | E | W    | P | U |
| Noctuoidea | Noctuidae | Erebinae     | Catocala Schrank, 1802       | nupta (Linnaeus, 1767)                     | 71.1 | E | W    | O | U |
| Noctuoidea | Noctuidae | Erebinae     | Catocala Schrank, 1802       | promissa (Denis & Schiffermüller, 1775)    | 58.9 | E | W    | O | U |
| Noctuoidea | Noctuidae | Erebinae     | Catocala Schrank, 1802       | fulminea (Scopoli, 1763)                   | 52.3 | E | W    | O | U |
| Noctuoidea | Noctuidae | Erebinae     | Euclidia Ochsenheimer, 1816  | glyphica (Linnaeus, 1758)                  | 28.1 | P | F    | O | M |
| Noctuoidea | Noctuidae | Erebinae     | Euclidia Ochsenheimer, 1816  | mi (Clerck, 1759)                          | 28.8 | P | F    | O | M |
| Noctuoidea | Noctuidae | Plusiinae    | Abrostola Ochsenheimer, 1816 | triplasia (Linnaeus, 1758)                 | 34.2 | P | F    | M | M |
| Noctuoidea | Noctuidae | Plusiinae    | Abrostola Ochsenheimer, 1816 | asclepiadis (Denis & Schiffermüller, 1775) | 33.6 | P | F    | M | M |
| Noctuoidea | Noctuidae | Plusiinae    | Abrostola Ochsenheimer, 1816 | tripartita (Hufnagel, 1766)                | 32.7 | P | F    | M | M |
| Noctuoidea | Noctuidae | Plusiinae    | Diachrysia Hübner, 1821      | chrysitis (Linnaeus, 1758)                 | 35.8 | L | F    | P | M |
| Noctuoidea | Noctuidae | Plusiinae    | Diachrysia Hübner, 1821      | tutti (Kostrowicki, 1961)                  | 29.5 | L | F    | P | M |
| Noctuoidea | Noctuidae | Plusiinae    | Euchalcia Hübner, 1821       | modestoides Poole, 1989                    | 29.1 | L | F    | O | M |
| Noctuoidea | Noctuidae | Plusiinae    | Polychrysia Hübner, 1821     | moneta (Fabricius, 1787)                   | 37.3 | L | F    | O | M |
| Noctuoidea | Noctuidae | Plusiinae    | Lamprotes Reichenbach, 1817  | c-aureum (Knoch, 1781)                     | 35.6 | L | F    | O | M |
| Noctuoidea | Noctuidae | Plusiinae    | Autographa Hübner, 1821      | pulchrina (Haworth, 1809)                  | 37.4 | L | F    | P | M |
| Noctuoidea | Noctuidae | Plusiinae    | Autographa Hübner, 1821      | jota (Linnaeus, 1758)                      | 39.1 | L | F    | P | U |
| Noctuoidea | Noctuidae | Plusiinae    | Autographa Hübner, 1821      | bractea (Denis & Schiffermüller, 1775)     | 40.3 | L | F    | P | M |
| Noctuoidea | Noctuidae | Plusiinae    | Syngrapha Hübner, 1821       | interrogationis (Linnaeus, 1758)           | 34.6 | L | F    | O | U |
| Noctuoidea | Noctuidae | Plusiinae    | Plusia Ochsenheimer, 1816    | festucae (Linnaeus, 1758)                  | 36.9 | L | F    | P | M |
| Noctuoidea | Noctuidae | Plusiinae    | Plusia Ochsenheimer, 1816    | putnami Grote, 1873                        | 31.8 | L | G    | P | M |
| Noctuoidea | Noctuidae | Eustrotiinae | Deltote Reichenbach, 1817    | pygarga (Hufnagel, 1766)                   | 24.1 | P | G    | O | M |
| Noctuoidea | Noctuidae | Eustrotiinae | Deltote Reichenbach, 1817    | uncula (Clerck, 1759)                      | 23.2 | P | G    | P | M |
| Noctuoidea | Noctuidae | Eustrotiinae | Deltote Reichenbach, 1817    | bankiana (Fabricius, 1775)                 | 22.0 | P | G    | P | M |
| Noctuoidea | Noctuidae | Pantheinae   | Panthea Hübner, 1820         | coenobita (Esper, 1785)                    | 46.6 | P | W(c) | O | M |
| Noctuoidea | Noctuidae | Pantheinae   | Trichosea Grote, 1875        | ludifica (Linnaeus, 1758)                  | 41.4 | P | W    | P | M |
| Noctuoidea | Noctuidae | Pantheinae   | Colocasia Ochsenheimer, 1816 | coryli (Linnaeus, 1758)                    | 32.8 | P | W    | P | M |
| Noctuoidea | Noctuidae | Dilobinae    | Diloba Boisduval, 1840       | caeruleocephala (Linnaeus, 1758)           | 38.0 | E | W    | P | U |
| Noctuoidea | Noctuidae | Acronictinae | Moma Hübner, 1820            | alpium (Osbeck, 1778)                      | 35.2 | P | W    | P | M |
| Noctuoidea | Noctuidae | Acronictinae | Simyra Ochsenheimer, 1816    | albovenosa (Goeze, 1781)                   | 36.5 | P | F    | P | M |
| Noctuoidea | Noctuidae | Acronictinae | Acronicta Ochsenheimer, 1816 | alni (Linnaeus, 1767)                      | 37.9 | P | W    | P | M |

|            |           |                |                              |  |      |    |    |   |   |
|------------|-----------|----------------|------------------------------|--|------|----|----|---|---|
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | cuspis (Hübner, 1813)                      | 42.5 | P  | W  | O | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | psi (Linnaeus, 1758)                       | 39.5 | P  | W  | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | aceris (Linnaeus, 1758)                    | 42.2 | P  | W  | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | leporina (Linnaeus, 1758)                  | 38.5 | P  | W  | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | megacephala (Denis & Schiffermüller, 1775) | 39.5 | P  | W  | O | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | strigosa (Denis & Schiffermüller, 1775)    | 29.9 | P  | W  | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | auricoma (Denis & Schiffermüller, 1775)    | 33.9 | P  | WH | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | euphorbiae (Denis & Schiffermüller, 1775)  | 31.1 | P  | WH | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Acronicta Ochsenheimer, 1816 | rumicis (Linnaeus, 1758)                   | 34.7 | P  | WH | P | M |
| Noctuoidae | Noctuidae | Acronictinae   | Craniophora Snellen, 1867    | ligustri (Denis & Schiffermüller, 1775)    | 37.4 | P  | W  | O | M |
| Noctuoidae | Noctuidae | Metoponinae    | Panemeria Hübner, 1823       | tenebrata (Scopoli, 1763)                  | 18.5 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | fraudatrix Eversmann, 1837                 | 37.5 | P  | F  | M | U |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | absinthii (Linnaeus, 1761)                 | 40.3 | P  | F  | M | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | argentea (Hufnagel, 1766)                  | 39.4 | P  | F  | M | U |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | artemisiae (Hufnagel, 1766)                | 41.0 | P  | F  | M | U |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | lactucae (Denis & Schiffermüller, 1775)    | 46.3 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | lucifuga (Denis & Schiffermüller, 1775)    | 45.1 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | umbratica (Linnaeus, 1758)                 | 49.3 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | chamomillae (Denis & Schiffermüller, 1775) | 46.5 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | gnaphalii (Hübner, 1813)                   | 35.9 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Cuculliinae    | Cucullia Schrank, 1802       | asteris (Denis & Schiffermüller, 1775)     | 48.0 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Oncocnemidinae | Calophasia Stephens, 1829    | lunula (Hufnagel, 1766)                    | 27.9 | P  | F  | M | M |
| Noctuoidae | Noctuidae | Amphipyridae   | Amphipyra Ochsenheimer, 1816 | pyramidea (Linnaeus, 1758)                 | 49.5 | E  | W  | P | U |
| Noctuoidae | Noctuidae | Amphipyridae   | Amphipyra Ochsenheimer, 1816 | berbera Rungs, 1949                        | 47.8 | E  | W  | P | U |
| Noctuoidae | Noctuidae | Amphipyridae   | Amphipyra Ochsenheimer, 1816 | perflua (Fabricius, 1787)                  | 49.1 | E  | W  | P | U |
| Noctuoidae | Noctuidae | Amphipyridae   | Amphipyra Ochsenheimer, 1816 | tragopoginis (Clerck, 1759)                | 37.8 | E  | F  | P | U |
| Noctuoidae | Noctuidae | Psaphidinae    | Brachionycha Hübner, 1819    | nubeculosa (Esper, 1785)                   | 52.0 | AP | W  | P | U |
| Noctuoidae | Noctuidae | Psaphidinae    | Allophytes Tams, 1942        | oxyacanthae (Linnaeus, 1758)               | 42.2 | E  | W  | O | U |
| Noctuoidae | Noctuidae | Heliethinae    | Pyrrhia Hübner, 1821         | umbra (Hufnagel, 1766)                     | 33.8 | P  | F  | P | M |
| Noctuoidae | Noctuidae | Heliethinae    | Heliethis Ochsenheimer, 1816 | viriplaca (Hufnagel, 1766)                 | 31.3 | P  | F  | P | M |
| Noctuoidae | Noctuidae | Condicinae     | Eucarta Lederer, 1857        | virgo (Treitschke, 1835)                   | 31.5 | P  | F  | O | M |
| Noctuoidae | Noctuidae | Eriopinae      | Callopietria Hübner, 1821    | juventina (Stoll, 1782)                    | 33.5 | L  | F  | M | M |
| Noctuoidae | Noctuidae | Bryophilinae   | Bryophila Treitschke, 1825   | raptricula (Denis & Schiffermüller, 1775)  | 27.6 | L  | L  | . | U |
| Noctuoidae | Noctuidae | Xyleninae      | Pseudeustrotia Warren, 1913  | candidula (Denis & Schiffermüller, 1775)   | 23.8 | P  | F  | O | M |

|            |           |           |                                      |   |      |   |      |   |   |
|------------|-----------|-----------|--------------------------------------|---|------|---|------|---|---|
| Noctuoidae | Noctuidae | Xyleninae | Elaphria Hübner, 1818                | venustula (Hübner, 1790)                | 20.0 | P | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Caradrina Ochsenheimer, 1816         | morpheus (Hufnagel, 1766)               | 29.7 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Caradrina Ochsenheimer, 1816         | selini (Boisduval, 1840)                | 27.2 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Caradrina Ochsenheimer, 1816         | clavipalpis (Scopoli, 1763)             | 31.9 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Hoplodrina Boursin, 1937             | octogenaria (Goeze, 1781)               | 30.7 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Hoplodrina Boursin, 1937             | blanda (Denis & Schiffermüller, 1775)   | 31.2 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Chilodes Herrich-Schäffer, 1849      | maritimus (Tauscher, 1806)              | 29.4 | L | G(i) | M | M |
| Noctuoidae | Noctuidae | Xyleninae | Charanyca Billberg, 1820             | trigrammica (Hufnagel, 1766)            | 32.9 | L | F    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Rusina Stephens, 1829                | ferruginea (Esper, 1785)                | 32.8 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Athetis Hübner, 1821                 | gluteosa (Treitschke, 1835)             | 26.0 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Athetis Hübner, 1821                 | pallustris (Hübner, 1808)               | 28.0 | L | F    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Athetis Hübner, 1821                 | lepigone (Möschler, 1860)               | 27.0 | L | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Dypterygia Stephens, 1829            | scabriuscula (Linnaeus, 1758)           | 37.0 | P | F    | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Trachea Ochsenheimer, 1816           | atriplicis (Linnaeus, 1758)             | 42.7 | P | F    | O | M |
| Noctuoidae | Noctuidae | Xyleninae | Thalpophila Hübner, 1820             | matura (Hufnagel, 1766)                 | 37.0 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Hyppa Duponchel, 1845                | rectilinea (Esper, 1788)                | 36.2 | L | WH   | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Actinotia Hübner, 1821               | polyodon (Clerck, 1759)                 | 30.8 | P | F    | M | M |
| Noctuoidae | Noctuidae | Xyleninae | Chloantha Boisduval et al, 1836      | hyperici (Denis & Schiffermüller, 1775) | 29.8 | P | F    | M | M |
| Noctuoidae | Noctuidae | Xyleninae | Euplexia Stephens, 1829              | lucipara (Linnaeus, 1758)               | 32.2 | P | WH   | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Calamia Hübner, 1821                 | tridens (Hufnagel, 1766)                | 38.7 | E | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Crypsedra Warren, 1911               | gemmea (Treitschke, 1825)               | 37.6 | E | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Helotropha Lederer, 1857             | leucostigma (Hübner, 1808)              | 36.0 | E | F    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Gortyna Ochsenheimer, 1816           | flavago (Denis & Schiffermüller, 1775)  | 37.4 | E | F    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Hydraecia Guenée, 1841               | micacea (Esper, 1789)                   | 35.5 | E | F    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Hydraecia Guenée, 1841               | petasitis Doubleday, 1847               | 44.8 | E | F    | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Amphipoea Billberg, 1820             | fucosa (Freyer, 1830)                   | 33.5 | E | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Amphipoea Billberg, 1820             | oculea (Linnaeus, 1761)                 | 30.3 | E | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Luperina Boisduval, 1828             | testacea (Denis & Schiffermüller, 1775) | 33.8 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Rhizedra Warren, 1911                | lutosa (Hübner, 1803)                   | 43.4 | E | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Sedina Urbahn, 1933                  | buettneri (Hering, 1858)                | 31.0 | E | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Nonagria Ochsenheimer, 1816          | typhae (Thunberg, 1784)                 | 46.7 | E | F    | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Arenostola Hampson, 1910             | phragmitidis (Hübner, 1803)             | 31.3 | E | G(i) | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Lenisa Fibiger, Zilli & Ronkay, 2005 | geminipuncta (Haworth, 1809)            | 31.0 | E | G(i) | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Archanara Walker, 1866               | dissoluta (Treitschke, 1825)            | 27.6 | E | G(i) | M | U |

|            |           |           |                             |  |      |   |      |   |   |
|------------|-----------|-----------|-----------------------------|--|------|---|------|---|---|
| Noctuoidae | Noctuidae | Xyleninae | Denticucullus Rakosy, 1996  | pygmina (Haworth, 1809)                    | 21.9 | E | G(i) | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Photedes Lederer, 1857      | fluxa (Hübner, 1809)                       | 25.3 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Photedes Lederer, 1857      | captiuncula (Treitschke, 1825)             | 16.9 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Photedes Lederer, 1857      | minima (Haworth, 1809)                     | 21.9 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Photedes Lederer, 1857      | extrema (Hübner, 1809)                     | 23.9 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Capsula Fibiger et al, 2005 | sparganii (Esper, 1790)                    | 38.7 | E | F    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Capsula Fibiger et al, 2005 | algae (Esper, 1789)                        | 36.5 | E | F    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Pabulatrix Sugi, 1982       | pabulatrix (Brahm, 1791)                   | 31.2 | E | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | remissa (Hübner, 1809)                     | 36.4 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | crenata (Hufnagel, 1766)                   | 38.7 | L | F    | O | M |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | anceps (Denis & Schiffermüller, 1775)      | 40.5 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | sordens (Hufnagel, 1766)                   | 36.3 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | illyria Freyer, 1846                       | 31.2 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | unanimis (Hübner, 1813)                    | 31.3 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | scolopacina (Esper, 1788)                  | 30.6 | L | G    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | oblonga (Haworth, 1809)                    | 43.9 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | monoglypha (Hufnagel, 1766)                | 47.5 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | lithoxylaea (Denis & Schiffermüller, 1775) | 46.9 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | sublustris (Esper, 1788)                   | 41.2 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | furva (Denis & Schiffermüller, 1775)       | 38.1 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | lateritia (Hufnagel, 1766)                 | 44.4 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | zeta (Treitschke, 1825)                    | 45.5 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | rubrarena (Treitschke, 1825)               | 40.8 | L | G    | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Apamea Ochsenheimer, 1816   | ophiogramma (Esper, 1793)                  | 30.4 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Mesapamea Heinicke, 1959    | remmi Rezbanyai-Reser, 1985                | 30.0 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Mesapamea Heinicke, 1959    | secalis (Linnaeus, 1758)                   | 32.4 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Mesapamea Heinicke, 1959    | secalella Remm, 1983                       | 28.5 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Mesoligia Boursin, 1965     | literosa (Haworth, 1809)                   | 22.3 | L | G(i) | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Mesoligia Boursin, 1965     | furuncula (Denis & Schiffermüller, 1775)   | 22.0 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Oligia Hübner, 1821         | strigilis (Linnaeus, 1758)                 | 25.8 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Oligia Hübner, 1821         | latruncula (Denis & Schiffermüller, 1775)  | 24.4 | L | G(i) | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Brachylomia Hampson, 1906   | vimalis (Fabricius, 1776)                  | 29.5 | E | W    | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Tiliacea Tutt, 1896         | citrago (Linnaeus, 1758)                   | 32.4 | E | W    | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Tiliacea Tutt, 1896         | aurago (Denis & Schiffermüller, 1775)      | 30.3 | E | W    | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Xanthia Ochsenheimer, 1816  | togata (Esper, 1788)                       | 31.7 | E | WH   | P | U |

|            |           |           |                           |   |      |   |    |   |   |
|------------|-----------|-----------|---------------------------|---|------|---|----|---|---|
| Noctuoidae | Noctuidae | Xyleninae | Cirrhia Hübner, 1821      | icteritia (Hufnagel, 1766)                    | 33.5 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Cirrhia Hübner, 1821      | gilvago (Denis & Schiffermüller, 1775)        | 36.0 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Cirrhia Hübner, 1821      | ocellaris (Borkhausen, 1792)                  | 35.0 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Mesogona Boisduval, 1840  | oxalina (Hübner, 1803)                        | 35.0 | E | W  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Agrochola Hübner, 1821    | nitida (Denis & Schiffermüller, 1775)         | 32.7 | E | F  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Agrochola Hübner, 1821    | litura (Linnaeus, 1761)                       | 32.6 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Agrochola Hübner, 1821    | helvola (Linnaeus, 1758)                      | 34.1 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Agrochola Hübner, 1821    | lota (Clerck, 1759)                           | 33.7 | E | W  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Agrochola Hübner, 1821    | macilenta (Hübner, 1809)                      | 31.6 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Agrochola Hübner, 1821    | circellaris (Hufnagel, 1766)                  | 34.6 | E | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Conistra Hübner, 1821     | vaccinii (Linnaeus, 1761)                     | 32.5 | A | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Conistra Hübner, 1821     | rubiginosa (Scopoli, 1763)                    | 34.7 | A | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Conistra Hübner, 1821     | rubiginea (Denis & Schiffermüller, 1775)      | 33.2 | A | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Conistra Hübner, 1821     | erythrocephala (Denis & Schiffermüller, 1775) | 34.2 | A | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Lithophane Hübner, 1821   | hepatica (Clerck, 1759)                       | 40.8 | A | W  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Lithophane Hübner, 1821   | ornitopus (Hufnagel, 1766)                    | 38.1 | A | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Lithophane Hübner, 1821   | furcifera (Hufnagel, 1766)                    | 43.8 | A | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Lithophane Hübner, 1821   | consocia (Borkhausen, 1792)                   | 43.1 | A | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Lithophane Hübner, 1821   | lamda (Fabricius, 1787)                       | 39.3 | A | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Xylena Ochsenheimer, 1816 | exsoleta (Linnaeus, 1758)                     | 58.4 | A | F  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Xylena Ochsenheimer, 1816 | vetusta (Hübner, 1813)                        | 57.7 | A | F  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Xylena Ochsenheimer, 1816 | solidaginis (Hübner, 1803)                    | 43.2 | E | F  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Eupsilia Hübner, 1821     | transversa (Hufnagel, 1766)                   | 41.4 | A | WH | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Enargia Hübner, 1821      | paleacea (Esper, 1788)                        | 40.5 | E | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Ipimorpha Hübner, 1821    | retusa (Linnaeus, 1761)                       | 29.0 | E | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Ipimorpha Hübner, 1821    | subtusa (Denis & Schiffermüller, 1775)        | 31.5 | E | W  | M | U |
| Noctuoidae | Noctuidae | Xyleninae | Cosmia Ochsenheimer, 1816 | affinis (Linnaeus, 1767)                      | 29.8 | E | W  | O | M |
| Noctuoidae | Noctuidae | Xyleninae | Cosmia Ochsenheimer, 1816 | trapezina (Linnaeus, 1758)                    | 31.2 | E | W  | P | M |
| Noctuoidae | Noctuidae | Xyleninae | Cosmia Ochsenheimer, 1816 | pyralina (Denis & Schiffermüller, 1775)       | 29.9 | E | W  | P | U |
| Noctuoidae | Noctuidae | Xyleninae | Parastichtis Hübner, 1821 | suspecta (Hübner, 1817)                       | 31.4 | E | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Parastichtis Hübner, 1821 | ypsillon (Denis & Schiffermüller, 1775)       | 35.4 | E | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Atypha Hübner, 1821       | pulmonaris (Esper, 1790)                      | 30.0 | E | F  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Dichonia Hübner, 1821     | aprilina (Linnaeus, 1758)                     | 42.8 | E | W  | O | U |
| Noctuoidae | Noctuidae | Xyleninae | Dryobotodes Warren, 1910  | eremita (Fabricius, 1775)                     | 33.7 | E | W  | M | U |

|            |           |           |                             |  |      |    |    |   |   |
|------------|-----------|-----------|-----------------------------|--|------|----|----|---|---|
| Noctuoidea | Noctuidae | Xyleninae | Antitype Hübner, 1821       | chi (Linnaeus, 1758)                       | 35.4 | E  | F  | P | U |
| Noctuoidea | Noctuidae | Xyleninae | Ammonoconia Lederer, 1857   | caecimacula (Denis & Schiffermüller, 1775) | 41.9 | E  | F  | P | U |
| Noctuoidea | Noctuidae | Xyleninae | Dasypolia Guenée, 1852      | templi (Thunberg, 1792)                    | 46.0 | A  | F  | O | U |
| Noctuoidea | Noctuidae | Xyleninae | Polymixis Hübner, 1820      | polymita (Linnaeus, 1761)                  | 40.1 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Xyleninae | Mniotype Franclemont, 1941  | adusta (Esper, 1790)                       | 38.8 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Xyleninae | Mniotype Franclemont, 1941  | satura (Denis & Schiffermüller, 1775)      | 42.9 | E  | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Panolis Hübner, 1821        | flammea (Denis & Schiffermüller, 1775)     | 33.8 | P  | W  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | incerta (Hufnagel, 1766)                   | 38.9 | AP | W  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | cerasi (Fabricius, 1775)                   | 36.0 | AP | W  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | cruda (Denis & Schiffermüller, 1775)       | 29.4 | AP | W  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | populeti (Fabricius, 1781)                 | 36.6 | AP | W  | M | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | gracilis (Denis & Schiffermüller, 1775)    | 38.0 | AP | F  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | opima (Hübner, 1809)                       | 35.1 | AP | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Orthosia Ochsenheimer, 1816 | gothica (Linnaeus, 1758)                   | 33.7 | AP | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Anorthoa Berio, 1980        | munda (Denis & Schiffermüller, 1775)       | 41.0 | P  | W  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Tholera Hübner, 1821        | cespitis (Denis & Schiffermüller, 1775)    | 36.8 | E  | G  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Tholera Hübner, 1821        | decimalis (Poda, 1761)                     | 38.9 | E  | G  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Cerapteryx Curtis, 1833     | graminis (Linnaeus, 1758)                  | 30.8 | E  | G  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Hadula Staudinger, 1889     | trifolii (Hufnagel, 1766)                  | 34.1 | P  | F  | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Anarta Ochsenheimer, 1816   | myrtilli (Linnaeus, 1761)                  | 23.9 | P  | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Polia Ochsenheimer, 1816    | bombycina (Hufnagel, 1766)                 | 47.2 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Polia Ochsenheimer, 1816    | trimaculosa (Esper, 1788)                  | 45.5 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Polia Ochsenheimer, 1816    | nebulosa (Hufnagel, 1766)                  | 50.2 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Lacanobia Billberg, 1820    | w-latinum (Hufnagel, 1766)                 | 38.1 | P  | WH | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Lacanobia Billberg, 1820    | thalassina (Hufnagel, 1766)                | 38.7 | P  | WH | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Lacanobia Billberg, 1820    | contigua (Denis & Schiffermüller, 1775)    | 36.2 | P  | WH | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Lacanobia Billberg, 1820    | suasa (Denis & Schiffermüller, 1775)       | 38.4 | P  | F  | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Lacanobia Billberg, 1820    | oleracea (Linnaeus, 1758)                  | 37.0 | P  | WH | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Melanchra Hübner, 1820      | persicariae (Linnaeus, 1761)               | 39.3 | P  | WH | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Melanchra Hübner, 1820      | psi (Linnaeus, 1758)                       | 36.2 | P  | WH | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Papestra Suchareva, 1973    | biren (Goeze, 1781)                        | 35.2 | P  | WH | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Hada Billberg, 1820         | plebeja (Linnaeus, 1761)                   | 32.8 | P  | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Mamestra Hübner, 1816       | brassicae (Linnaeus, 1758)                 | 41.2 | P  | F  | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Sideridis Hübner, 1821      | rivularis (Fabricius, 1775)                | 31.2 | P  | F  | O | M |

|            |           |           |                              |   |      |   |    |   |   |
|------------|-----------|-----------|------------------------------|---|------|---|----|---|---|
| Noctuoidea | Noctuidae | Hadeninae | Sideridis Hübner, 1821       | reticulata (Goeze, 1781)                  | 36.8 | P | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Conisania Hampson, 1905      | luteago (Denis & Schiffermüller, 1775)    | 34.5 | P | F  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Hecatera Guenée, 1852        | bicolorata (Hufnagel, 1766)               | 28.4 | P | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Hadena Schrank, 1802         | bicuris (Hufnagel, 1766)                  | 36.5 | P | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Hadena Schrank, 1802         | capsincola (Denis & Schiffermüller, 1775) | 32.6 | P | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Hadena Schrank, 1802         | compta (Denis & Schiffermüller, 1775)     | 28.4 | P | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Hadena Schrank, 1802         | confusa (Hufnagel, 1766)                  | 31.6 | P | F  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Hadena Schrank, 1802         | albimacula (Borkhausen, 1792)             | 32.0 | P | F  | M | M |
| Noctuoidea | Noctuidae | Hadeninae | Hadena Schrank, 1802         | perplexa (Denis & Schiffermüller, 1775)   | 30.5 | P | F  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | turca (Linnaeus, 1761)                    | 42.1 | L | G  | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | pudorina (Denis & Schiffermüller, 1775)   | 37.8 | L | G  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | conigera (Denis & Schiffermüller, 1775)   | 32.9 | L | G  | O | U |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | pallens (Linnaeus, 1758)                  | 34.3 | L | G  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | impura (Hübner, 1808)                     | 32.7 | L | G  | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | straminea (Treitschke, 1825)              | 33.9 | L | G  | P | M |
| Noctuoidea | Noctuidae | Hadeninae | Mythimna Ochsenheimer, 1816  | ferrago (Fabricius, 1787)                 | 37.5 | L | G  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Leucania Ochsenheimer, 1816  | comma (Linnaeus, 1761)                    | 34.8 | L | G  | O | M |
| Noctuoidea | Noctuidae | Hadeninae | Leucania Ochsenheimer, 1816  | obsoleta (Hübner, 1803)                   | 33.0 | L | G  | M | M |
| Noctuoidea | Noctuidae | Hadeninae | Senta Stephens, 1834         | flammea (Curtis, 1828)                    | 31.7 | P | G  | M | M |
| Noctuoidea | Noctuidae | Hadeninae | Lasionycta Aurivillius, 1892 | proxima (Hübner, 1809)                    | 31.7 | L | F  | P | U |
| Noctuoidea | Noctuidae | Hadeninae | Lasionycta Aurivillius, 1892 | imbecilla (Fabricius, 1794)               | 26.0 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Actebia Stephens, 1829       | praecox (Linnaeus, 1758)                  | 40.9 | L | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Euxoa Hübner, 1821           | obelisca (Denis & Schiffermüller, 1775)   | 33.5 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Euxoa Hübner, 1821           | eruta (Hübner, 1817)                      | 35.5 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Euxoa Hübner, 1821           | nigrofusca (Esper, 1788)                  | 31.5 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Euxoa Hübner, 1821           | tritici (Linnaeus, 1761)                  | 31.0 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Euxoa Hübner, 1821           | nigricans (Linnaeus, 1761)                | 33.3 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Euxoa Hübner, 1821           | recussa (Hübner, 1817)                    | 34.7 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Agrotis Ochsenheimer, 1816   | exclamationis (Linnaeus, 1758)            | 37.2 | L | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Agrotis Ochsenheimer, 1816   | segetum (Denis & Schiffermüller, 1775)    | 38.5 | L | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Agrotis Ochsenheimer, 1816   | clavis (Hufnagel, 1766)                   | 36.2 | L | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Agrotis Ochsenheimer, 1816   | vestigialis (Hufnagel, 1766)              | 33.7 | L | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Axylia Hübner, 1821          | putris (Linnaeus, 1761)                   | 32.6 | P | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Ochroleura Hübner, 1821      | plecta (Linnaeus, 1761)                   | 28.6 | P | F  | P | M |

|            |           |           |                                |   |      |    |    |   |   |
|------------|-----------|-----------|--------------------------------|---|------|----|----|---|---|
| Noctuoidea | Noctuidae | Noctuinae | Diarsia Hübner, 1821           | dahlia (Hübner, 1813)                       | 35.0 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Diarsia Hübner, 1821           | brunnea (Denis & Schiffermüller, 1775)      | 37.0 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Diarsia Hübner, 1821           | mendica (Fabricius, 1775)                   | 32.5 | L  | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Diarsia Hübner, 1821           | rubi (Vieweg, 1790)                         | 32.8 | L  | WH | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Cerastis Ochsenheimer, 1816    | rubricosa (Denis & Schiffermüller, 1775)    | 34.0 | AP | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Cerastis Ochsenheimer, 1816    | leucographa (Denis & Schiffermüller, 1775)  | 31.7 | AP | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Lycophotia Hübner, 1821        | porphyrea (Denis & Schiffermüller, 1775)    | 28.8 | L  | F  | O | U |
| Noctuoidea | Noctuidae | Noctuinae | Epipsilia Hübner, 1821         | grisescens (Fabricius, 1794)                | 34.3 | L  | G  | O | U |
| Noctuoidea | Noctuidae | Noctuinae | Rhyacia Hübner, 1821           | simulans (Hufnagel, 1766)                   | 38.7 | L  | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Chersotis Boisduval, 1840      | cuprea (Denis & Schiffermüller, 1775)       | 34.9 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Standfussiana Boursin, 1946    | lucernea (Linnaeus, 1758)                   | 39.3 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Noctua Linnaeus, 1758          | pronuba (Linnaeus, 1758)                    | 55.6 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Noctua Linnaeus, 1758          | fimbriata (Schreber, 1759)                  | 53.7 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Noctua Linnaeus, 1758          | orbona (Hufnagel, 1766)                     | 39.5 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Noctua Linnaeus, 1758          | interposita (Hübner, 1789)                  | 41.5 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Noctua Linnaeus, 1758          | comes Hübner, 1813                          | 42.0 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Spaelotis Boisduval, 1840      | ravida (Denis & Schiffermüller, 1775)       | 39.8 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Opigena Boisduval, 1840        | polygona (Denis & Schiffermüller, 1775)     | 36.4 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Eurois Hübner, 1821            | occultus (Linnaeus, 1758)                   | 56.4 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Graphiphora Ochsenheimer, 1816 | augur (Fabricius, 1775)                     | 41.2 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Anaplectoides McDunnough, 1929 | prasinus (Denis & Schiffermüller, 1775)     | 46.6 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | baja (Denis & Schiffermüller, 1775)         | 38.6 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | castanea (Esper, 1798)                      | 37.1 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | xanthographa (Denis & Schiffermüller, 1775) | 34.6 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | sexstrigata (Haworth, 1809)                 | 34.7 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | c-nigrum (Linnaeus, 1758)                   | 38.1 | L  | F  | P | M |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | ditrapezium (Denis & Schiffermüller, 1775)  | 42.0 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | triangulum (Hufnagel, 1766)                 | 39.7 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Xestia Hübner, 1818            | ashworthii (Doubleday, 1855)                | 39.8 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Eugraphe Hübner, 1821          | sigma (Denis & Schiffermüller, 1775)        | 40.2 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Eugnorisma Boursin, 1946       | glareosum (Esper, 1788)                     | 32.5 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Eugnorisma Boursin, 1946       | depunctum (Linnaeus, 1761)                  | 37.5 | L  | F  | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Protolampra McDunnough, 1929   | sobrina (Duponchel, 1843)                   | 33.8 | L  | WH | P | U |
| Noctuoidea | Noctuidae | Noctuinae | Naenia Stephens, 1827          | typica (Linnaeus, 1758)                     | 39.8 | L  | WH | P | U |



Table A2. Proportions of uni- and multivoltine species classified by overwintering stage and host type.

| Overwintering stage: adult | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|----------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Grasses                    | 0                         | 0                           | 0                  | .                      |
| Woody plants               | 25                        | 7                           | 32                 | 21.9                   |
| Forbs                      | 6                         | 3                           | 9                  | 33.3                   |
| Woody plants and herbs     | 10                        | 4                           | 14                 | 28.6                   |
| <b>All species</b>         | <b>41</b>                 | <b>14</b>                   | <b>55</b>          | <b>25.5</b>            |

| Overwintering stage: egg | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|--------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Grasses                  | 15                        | 0                           | 15                 | 0.0                    |
| Woody plants             | 55                        | 7                           | 62                 | 11.3                   |
| Forbs                    | 27                        | 3                           | 30                 | 10.0                   |
| Woody plants and herbs   | 17                        | 1                           | 18                 | 5.6                    |
| <b>All species</b>       | <b>114</b>                | <b>11</b>                   | <b>125</b>         | <b>8.8</b>             |

| Overwintering stage: larva | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|----------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Grasses                    | 40                        | 16                          | 56                 | 28.6                   |
| Woody plants               | 10                        | 26                          | 36                 | 72.2                   |
| Forbs                      | 50                        | 78                          | 128                | 60.9                   |
| Woody plants and herbs     | 24                        | 13                          | 37                 | 35.1                   |
| <b>All species</b>         | <b>136</b>                | <b>140</b>                  | <b>276</b>         | <b>50.7</b>            |

| Overwintering stage: pupa | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|---------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Grasses                   | 0                         | 5                           | 5                  | 100.0                  |
| Woody plants              | 22                        | 86                          | 108                | 79.6                   |
| Forbs                     | 25                        | 108                         | 133                | 81.2                   |
| Woody plants and herbs    | 4                         | 21                          | 25                 | 84.0                   |
| <b>All species</b>        | <b>52</b>                 | <b>221</b>                  | <b>273</b>         | <b>81.0</b>            |

Table A3. Proportions of uni- and multivoltine species classified by overwintering stage and larval diet breadth.

| Overwintering stage: adult | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|----------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Monophagous                | 4                         | 5                           | 9                  | 55.6                   |
| Oligophagous               | 13                        | 3                           | 16                 | 18.8                   |
| Polyphagous                | 25                        | 6                           | 30                 | 20.0                   |
| <b>All</b>                 | <b>41</b>                 | <b>14</b>                   | <b>55</b>          | <b>25.5</b>            |

| Overwintering stage: larva | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|----------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Monophagous                | 9                         | 21                          | 30                 | 70.0                   |
| Oligophagous               | 51                        | 40                          | 91                 | 44.0                   |
| Polyphagous                | 68                        | 74                          | 142                | 52.1                   |
| <b>All</b>                 | <b>136</b>                | <b>140</b>                  | <b>276</b>         | <b>50.7</b>            |

| Overwintering stage: egg | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|--------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Monophagous              | 29                        | 2                           | 31                 | 6.5                    |
| Oligophagous             | 34                        | 3                           | 37                 | 8.1                    |
| Polyphagous              | 51                        | 6                           | 57                 | 10.5                   |
| <b>All</b>               | <b>114</b>                | <b>11</b>                   | <b>125</b>         | <b>8.8</b>             |

| Overwintering stage: pupa | No. of univoltine species | No. of multivoltine species | No. of all species | % multivoltine species |
|---------------------------|---------------------------|-----------------------------|--------------------|------------------------|
| Monophagous               | 15                        | 45                          | 60                 | 75.0                   |
| Oligophagous              | 20                        | 94                          | 114                | 82.5                   |
| Polyphagous               | 16                        | 81                          | 97                 | 83.5                   |
| <b>All</b>                | <b>52</b>                 | <b>221</b>                  | <b>273</b>         | <b>81.0</b>            |

Figure A1. Proportions of multivoltine and univoltine species in the major macrolepidopteran clades studied classified by overwintering stage.

