Table. Commercial availability of invertebrate natural enemies used worldwide in augmentative biological control, with region of use, year of first use and market value as per September 2016. Yellow marked sections in the table below are additions to Table 1 in van Lenteren, J.C., 2012. The state of commercial augmentative biological control: plenty of natural enemies, but a frustrating lack of uptake. BioControl 57: 1-20

| Natural enemy          | Classification | Region where used              | Target(s)          | Year of first use (estimated) | Market value |
|------------------------|----------------|-------------------------------|--------------------|--------------------------------|--------------|
| Adalia bipunctata      | Coleoptera     | Europe, North America         | aphids             | 1998                           | S            |
| Adalia spp             | Coleoptera     | Latin America                 | aphids             | 1941                           | M            |
| Ageniaspis citricola   | Hymenoptera    | Latin America                 | lepidopterans      | 1998                           | M            |
| Aleochara bilineata    | Coleoptera     | Europe                        | root flies         | 1995                           | S            |
| Aeolothrips intermedius| Thysanoptera   | Europe                        | thrips             | 2000                           | S            |
| Aleurothrips fasciapennis| Thysanoptera  | Europe                        | diaspids           | 1990                           | S            |
| Alloptrona convexifrons| Hymenoptera    | Europe                        | pseudococcids      | 2005                           | S            |
| Alloptrona musae       | Hymenoptera    | Europe                        | pseudococcids      | 2006                           | S            |
| Amblydromalus limonicus| Acari          | Europe                        | thrips, whiteflies, tarsonomids | 2013 | L |
| Amblyseius aizawai     | Acari          | Asia                          | mites              | 1992                           | M            |
| Amblyseius andersoni (= potentillae) | Acari | Europe, North America, Asia | mites              | 1995                           | S            |
| Amblyseius largoensis  | Acari          | North America                 | mites              | 1995                           | S            |
| Amblyseius limonicus   | Acari          | Europe                        | mites, thrips      | 1995                           | S            |
| Amblyseius longispinosus| Acari         | Asia                          | mites              | 1990                           | S            |
| Amblyseius makuwa      | Acari          | Asia                          | mites              | 1991                           | S            |
| Amblyseius meke New Zealandiae | Acari | Europe                        | mites              | 1985                           | S            |
| Amblyseius nicholsi    | Acari          | Asia                          | mites in citrus    | 1980                           | L            |
| Amblyseius swirskii    | Acari          | Europe, Africa North & South, North & Latin America, Asia | mites, thrips, whiteflies | 2005 | L |
| Amblyseius womersleyii | Acari          | Asia                          | mites              | 2005                           | L            |
| Amblyseius spp.        | Acari          | Australia                      | mites in citrus    | 1990                           | L            |
| Ampulex compressa      | Hymenoptera    | Europe                        | cockroaches        | 1990                           | S            |
| Anagrus atomus         | Hymenoptera    | Europe                        | cicadellids        | 1990                           | S            |
| Anagyrus dactyloptii   | Hymenoptera    | Europe                        | pseudococcids      | 1995                           | S            |
| Species                        | Order          | Suborder     | Continent  | Preferred Prey     | Year | Taxonomic Rank |
|-------------------------------|----------------|--------------|------------|--------------------|------|----------------|
| *Anagyrus fusciventris*       | Hymenoptera    |              | Europe     | pseudococcids      | 1995 | S              |
| *Anagyrus kamali*             | Hymenoptera    |              | Latin America | pseudococcids     | 1990 | S              |
| *Anagyrus pseudococci*        | Hymenoptera    |              | Europe, North America | pseudococcids | 1995 | S              |
| *Anagyrus sinoe*              | Hymenoptera    |              | Europe     | pseudococcids      | 2006 | S              |
| *Anaphes iole*                | Hymenoptera    |              | Europe     | hemipterans        | 1990 | S              |
| *Anaphes nitens*              | Hymenoptera    |              | Europe     | coleopterans       | 1995 | S              |
| *Anastatus japonicus*         | Hymenoptera    |              | Asia       | hemipterans        | 1970 | L              |
| *Anastatus sp*                | Hymenoptera    |              | Asia, Australia | hemipterans       | 2010 | S              |
| *Androlaelaps casalis*        | Acari          |              | Europe     | mites on vertebrates | 2008 | M              |
| *Anisopteromalus calandrae*   | Hymenoptera    |              | Europe, North America | coleopterans | 1990 | S              |
| *Anthocoris nemoralis*        | Hemiptera      |              | Europe, North America | psyllids, thrips | 1990 | S              |
| *Anthocoris nemorum*          | Hymenoptera    |              | Europe     | psyllids, thrips   | 1992 | S              |
| *Aphelinus abdominalis*       | Hymenoptera    |              | Europe, Africa North, North America, Asia | aphids | 1992 | M              |
| *Aphelinus asychis*           | Hymenoptera    |              | Asia       | aphids             | 2005 | S              |
| *Aphelinus mali*              | Hymenoptera    |              | Europe     | aphids             | 1980 | S              |
| *Aphelinus varipes*           | Hymenoptera    |              | Europe     | aphids             | 2000 | S              |
| *Aphidius colemani*           | Hymenoptera    |              | Europe, Africa North & South, North America, Asia, Australia, New Zealand | aphids | 1991 | L              |
| *Aphidius ervi*               | Hymenoptera    |              | Europe, Africa North, North & Latin America, Asia | aphids | 1996 | L              |
| *Aphidius gifuensis*          | Hymenoptera    |              | Europe, Asia | aphids             | 2005 | M              |
| *Aphidius matricariae*        | Hymenoptera    |              | Europe, North America | aphids | 1980 | M              |
| *Aphidius sp*                 | Hymenoptera    |              | Latin America | aphids         | 1980 | S              |
| *Aphidius transcaspinus*      | Hymenoptera    |              | Africa South | aphids             | 2005 | M              |
| *Aphidius utoae*              | Hymenoptera    |              | Europe     | aphids             | 1990 | S              |
| *Aphidoletes aphidimyza*      | Diptera        |              | Europe, Africa North & South, North America, Asia | aphids | 1989 | L              |
| *Aphytis diaspis*             | Hymenoptera    |              | Europe     | diaspids           | 1990 | S              |
| *Aphytis holoxanthus*         | Hymenoptera    |              | Europe     | diaspids           | 1996 | S              |
| *Aphytis lepidosaphes*        | Hymenoptera    |              | Europe, Latin America | diaspids | 1985 | S              |
| *Aphytis lingnanensis*        | Hymenoptera    |              | Europe, Africa South, Australia | diaspids | 1906 | L              |
| *Aphytis melinus*             | Hymenoptera    |              | Europe, North America, Australia | diaspids | 1961 | L              |
| *Aphytis sp*                  | Hymenoptera    |              | Latin America | diaspids         | 1990 | M              |
| *Aprostocetus hagenowii*      | Hymenoptera    |              | Europe     | cockroaches        | 1990 | S              |
| *Arrhenophagus albitibiae*     | Hymenoptera    |              | Europe     | diaspids           | 1990 | S              |
| Species                          | Order          | Continent         | Distribution          | Year | Helpful hint |
|---------------------------------|----------------|-------------------|-----------------------|------|--------------|
| Billaea claripalpis             | Diptera        | Latin America     |                       | 1976 | S            |
| Blastothrix brittanica          | Hymenoptera    | Europe            | coccids               | 2005 | S            |
| Bracon brevicornis              | Hymenoptera    | Europe            | lepidopterans         | 2000 | S            |
| Bracon hebetor                  | Hymenoptera    | Europe, North America | lepidopterans     | 1990 | S            |
| Brontocoris tabidus             | Hemiptera      | Latin America     | lepidopterans         | 1990 | S            |
| Cales noacki                    | Hymenoptera    | Europe            | whiteflies            | 1970 | S            |
| Carcinops pamilio               | Coleoptera     | North America     | dipterans             | 1990 | S            |
| Cephalonomia stephanoderis      | Hymenoptera    | Latin America     | coleopterans          | 1990 | S            |
| Cephalonoma tarsalis            | Hymenoptera    | Europe            | coleopterans          | 1995 | S            |
| Ceraeochrysa cincta             | Neuroptera     | Latin America     | aphids                | 1990 | S            |
| Ceraeochrysa smithi             | Neuroptera     | Latin America     | aphids                | 1995 | S            |
| Cheyletus eruditus              | Acari          | Europe            | vertebrate mites      | 2004 | S            |
| Chillocorus baileyi             | Coleoptera     | Europe, Australia | diaspidids            | 1992 | S            |
| Chillocorus bipustulatus        | Coleoptera     | Europe            | diaspidids            | 1992 | S            |
| Chillocorus circundatus         | Coleoptera     | Europe, Australia | diaspidids            | 1992 | S            |
| Closiota canea                  | Hymenoptera    | Asia              | lepidopterans         | 2005 | M            |
| Chillocorus nigriratis          | Coleoptera     | Europe, Africa South | diaspidids       | 1985 | S            |
| Chrysoperla asoralis            | Neuroptera     | Latin America     | aphids                | 1990 | S            |
| Chrysoperla (= Chrysopa) carnea | Neuroptera     | Europe, Africa North, North & Latin America, Asia | aphids | 1970 | M            |
| Chrysoperla cinta               | Neuroptera     | Latin America     | aphids                | 1990 | S            |
| Chrysoperla comanche            | Neuroptera     | North America     | aphids                | 1990 | M            |
| Chrysoperla externa             | Neuroptera     | Latin America     | lepidopterans         | 1980 | L            |
| Chrysoperla lucasina            | Neuroptera     | Europe            | aphids                | 1995 | M            |
| Chrysoperla spp Peru            | Neuroptera     | Latin America     | aphids                | 1990 | L            |
| Chrysoperla rufilabris          | Neuroptera     | Europe, North America, Latin America | aphids | 1970 | S            |
| Chrysoperla (=Chrysopa) sinica  | Neuroptera     | Asia              | aphids, lepidopterans | 2000 | M            |
| Clistostethus arcuratus         | Coleoptera     | Europe            | whiteflies            | 1997 | S            |
| Coccidencyrtus ochraceipes      | Hymenoptera    | Europe            | diaspidids            | 1995 | S            |
| Coccidophillus citricola        | Coleoptera     | Latin America, Europe | diaspidids    | 1982 | S            |
| Coccidoxenoides peregrinus      | Hymenoptera    | North & Latin America | diaspidids, pseudococcids | 2006 | S            |
| Coccidoxenoides perminutus      | Hymenoptera    | Europe, Africa North & South, Latin America | diaspidids, pseudococcids | 1995 | S            |
| Coccinella septempunctata       | Coleoptera     | Europe            | aphids                | 1980 | S            |
| Coccophagus cowperi             | Hymenoptera    | Europe            | coccids, pseudococcids | 1985 | S            |
| Coccophagus gurneyi             | Hymenoptera    | Europe            | diaspidids, pseudococcids | 1985 | S            |
| Species                        | Order            | Continent          | Subgroup             | Year | Status |
|--------------------------------|------------------|--------------------|----------------------|------|--------|
| Coccophagus lycimnia          | Hymenoptera      | Europe             | coccids              | 1988 | S      |
| Coccophagus pulvinariae       | Hymenoptera      | Europe             | coccids              | 1990 | S      |
| Coccophagus rusti             | Hymenoptera      | Europe             | coccids              | 1988 | S      |
| Coccophagus scutellaris       | Hymenoptera      | Europe             | coccids              | 1986 | S      |
| Coccophagus spp Peru          | Hymenoptera      | Latin America      | coccids              | 1990 | M      |
| Coenosia attenuata            | Diptera          | Europe             | dipters, whiteflies  | 1996 | S      |
| Comperia merceti              | Hymenoptera      | North America      | cockroaches          | 1980 | S      |
| Comperiella bifasciata        | Hymenoptera      | Europe             | diaspids             | 1985 | S      |
| Coniopteryx tineiformis       | Neuroptera       | Europe             | aphids, mites, scales| 1990-2005 | S |
| Conwentzia psociformis        | Neuroptera       | Europe             | aphids, mites, scales| 1990-2005 | S |
| Copidosoma sp                 | Hymenoptera      | Latin America      | lepidopterans        | 1995 | S      |
| Cotesia flavipes              | Hymenoptera      | Latin America, Asia| lepidopterans        | 1974 | L      |
| Cotesia marginiventris        | Hymenoptera      | Europe             | lepidopterans        | 1995 | S      |
| Cotesia plutellae             | Hymenoptera      | North America      | lepidopterans        | 1995 | M      |
| Cotesia rubecola              | Hymenoptera      | Europe             | lepidopterans        | 2000 | S      |
| Cryptolaemus montrozieri      | Coleoptera       | Europe, South America| mealybugs           | 1927 | M      |
| Cycloneda limifera            | Coleoptera       | Europe             | aphids               | 1990 | S      |
| Cybocephalus nipponicus       | Coleoptera       | North America      | scales               | 2000 | S      |
| Dacnusa sibirica              | Hymenoptera      | Europe, Africa North, North & Latin America, Asia | dipters | 1981 | L      |
| Dalotia (Atheta) coriaria     | Coleoptera       | Europe, North America, Asia, Australia | dipters, thrips     | 2000 | S      |
| Delphastus catalinae          | Coleoptera       | Europe, North America, Asia | whiteflies         | 1985 | S      |
| Delphastus pusillus           | Coleoptera       | Europe, North America | whiteflies         | 1993 | M      |
| Diachasmimorpha longicaudata  | Hymenoptera      | Latin America      | dipters              | 1990 | M      |
| Diabrotica undecimpunctata    | Coleoptera       | Europe             | dipters              | 1990 | S      |
| Dicyphus errans               | Hemiptera        | Europe             | whiteflies           | 2000 | S      |
| Dicyphus hesperus             | Hemiptera        | Europe             | whiteflies           | 2000-2005 | L |
| Dicyphus hesperus             | Hemiptera        | North America      | whiteflies           | 1995 | M      |
| Diglyphus begini              | Hymenoptera      | Latin America      | dipters              | 2000 | M      |
| Diglyphus isaea               | Hymenoptera      | Europe, Africa North & South, North & Latin America, Asia | dipters | 1984 | L      |
| Diomus sp                     | Coleoptera       | Europe             | scales               | 1990 | S      |
| Dirhinus giffardii            | Hymenoptera      | Latin America      | dipters              | 1990 | S      |
| Elasmus albipennis            | Hymenoptera      | Europe             | lepidopterans        | 1995 | S      |
| Encarsia citrina              | Hymenoptera      | Europe             | diaspids             | 1984 | S      |
| Species                        | Order          | Region                                      | Hosts                          | Dates     | Taxonomic Status |
|--------------------------------|----------------|---------------------------------------------|--------------------------------|-----------|-------------------|
| Encarsia guadeloupae           | Hymenoptera    | Europe, Africa North & South, North & Latin America, Asia, Australia, New Zealand | whiteflies                      | 1990-2000 | S                 |
| Encarsia hispida               | Hymenoptera    | Europe                                      | whiteflies                      | 1990-2000 | S                 |
| Encarsia formosa               | Hymenoptera    | Europe, Africa North & South, North & Latin America, Asia | whiteflies                      | 1926      | L                 |
| Encarsia perniciosi            | Hymenoptera    | Europe                                      | scales                          | 1932      | L                 |
| Encarsia protransvena          | Hymenoptera    | Europe                                      | whiteflies                      | 1990-2005 | S                 |
| Encarsia sp                    | Hymenoptera    | Latin America                               | whiteflies                      | 1995      | S                 |
| Encarsia tricolor              | Hymenoptera    | Europe                                      | whiteflies                      | 1985      | S                 |
| Encyrtus infelix               | Hymenoptera    | Europe                                      | coccids                         | 1990      | S                 |
| Encyrtus lecaniorum            | Hymenoptera    | Europe                                      | coccids                         | 1985      | S                 |
| Ephedrus cerasicola            | Hymenoptera    | Europe                                      | aphids                          | 2008      | M                 |
| Ephedrus plagiator             | Hymenoptera    | Europe                                      | aphids                          | 2010      | M                 |
| Episyrphus balteatus           | Diptera        | Europe                                      | aphids                          | 1990      | M                 |
| Eriocerus corni                | Hymenoptera    | Latin America                               | whiteflies                      | 2000      | S                 |
| Eretmocerus eremicus (=californicus) | Hymenoptera | Europa, Africa North & South, North & Latin America, Asia | whiteflies                      | 1995      | L                 |
| Eretmocerus hayati             | Hymenoptera    | Australia                                   | whiteflies                      | 2006      | M                 |
| Eretmocerus mundus             | Hymenoptera    | Europe, Africa North & South, North & Latin America, Asia | whiteflies                      | 2001      | L                 |
| Eretmocerus warrae             | Hymenoptera    | Australia, New Zealand                      | whiteflies                      | 2000      | L                 |
| Eriopis connexa                | Coleoptera     | Latin America                               | coccids, aphids, hemipterans    | 2000      | S                 |
| Eucanthecona furcellata        | Hemiptera      | Asia                                        | aphids, lepidopterans           | 1996      | S                 |
| Euseius finlandicus            | Acari          | Europe                                      | mites                           | 2000      | S                 |
| Euseius gallicus               | Acari          | Europe                                      | thrips, whitefly                | 2013      | M                 |
| Euseius ovalis                 | Acari          | Europe                                      | thrips, whitefly                | 2008      | M                 |
| Euseius scutalis               | Acari          | Europe                                      | mites                           | 1990      | S                 |
| Euseius stipulatus             | Acari          | Europe, South America                       | mites                           | 2006      | M                 |
| Exochomus laeviusculus         | Coleoptera     | Europe                                      | aphids, scales                  | 1988      | S                 |
| Exochomus quadripustulatus     | Coleoptera     | Europe                                      | aphids, scales                  | 2000      | S                 |
| Feltiella acarisuga (=Therodiplosis persicae) | Diptera | Europe, North & Latin America | mites                           | 1990      | M                 |
| Forficula sp                   | Dermaptera     | Asia                                        | lepidopterans                   | 2010      | S                 |
| Frankliniathrips megalops (= myrmicaeformis) | Thysanoptera | Europe                                      | thrips                          | 1992      | S                 |
| Frankliniathrips vesiformis    | Thysanoptera   | Europe, Asia                                | thrips                          | 1990      | S                 |
| Galendromus (Metaseiulus) annecens | Acari   | North America                               | mites                           | 1990      | M                 |
| Species                                      | Class     | Order     | Suborder | Primary Range                          | Pest Types                      | Year | Type |
|----------------------------------------------|-----------|-----------|----------|----------------------------------------|----------------------------------|------|------|
| Galendromus (Metaseiulus) helveolus          | Acari     |           |          | North America                          | mites                            | 1999 | S    |
| Galendromus (Typhlodromus) occidentalis      | Acari     |           |          | North America, Australia                | mites                            | 1969 | L    |
| Galendromus (Metaseiulus) pyri              | Acari     |           |          | North America                          | mites                            | 1995 | L    |
| Galeolaelaps (Hypoaspis) aculeifer           | Acari     |           |          | Europe, Africa North, North America, Asia, Australia, New Zealand | dipterans, thrips, mites | 1995 | L    |
| Galeolaelaps gillespiei                     | Acari     |           |          | North America                          | dipterans, thrips                | 2010 | L    |
| Geocoris punctipes                          | Hemiptera |           |          | North & Latin America                   | lepidopterans, whiteflies        | 2000 | S    |
| Goniozus legneri                            | Hymenoptera |         |          | North America                          | lepidopterans                    | 1990 | L    |
| Gynaecibius liturivorus                     | Acari     |           |          | Asia                                    | thrips, whitefly                 | 2013 | M    |
| Gyranusidea litura                          | Hymenoptera |         |          | Europe                                  | pseudococcids                    | 1990 | M    |
| Habrobracon sp                              | Hymenoptera |         |          | Latin America                           | lepidopterans                    | 1986 | S    |
| Haplothrips brevitubus                      | Thysanoptera |       |          | Asia                                    | thrips                          | 2010 | S    |
| Harmonia axyridis                           | Coleoptera |         |          | Europe, except France where wingless H. axyridis are used | aphids                          | 1995-2005 | L |
| Harmonia axyridis                           | Coleoptera |         |          | North America, Asia                     | aphids                          | 1990 | L    |
| Heterorhabditis bacteriophora               | Nematoda  | Coleoptera |          | Europe, Africa North, North & Latin America, Australia | coleopterans | 1984 | L    |
| Heterorhabditis indica                      | Nematoda  | Coleoptera |          | North America                           | coleopterans, dipterans          | 2000 | S    |
| Heterorhabditis megidis                     | Nematoda  | Coleoptera |          | Europe, North & Latin America           | coleopterans                    | 1990 | L    |
| Heterorhabditis zealandica                  | Nematoda  | Coleoptera |          | Australia                               | coleopterans                    | 1990 | L    |
| Hippodamia convergens                       | Coleoptera |         |          | Europe, Africa North, North & Latin America | aphids, thrips, coccids       | 1993 | S    |
| Hippodamia variegata                        | Coleoptera |         |          | Australia, Latin America                | aphids                          | 2000 | S    |
| Holobus flavicornis                         | Coleoptera |         |          | Europe                                  | mites                          | 2000 | S    |
| Hydrotaea aenescens                         | Diptera   |          |          | Europe, North America                   | dipterans                       | 2000 | S    |
| Iphiseius (Amblyseius) degenerans           | Acari     | Coleoptera |          | Europe, North America                   | thrips, mites                   | 1993 | M    |
| Kampimodromus aberrans                      | Acari     | Coleoptera |          | Europe                                  | mites                          | 1960-1990 | S |
| Karnyothrips melaleucus                     | Thysanoptera |       |          | Europe                                  | diaspids                        | 1985 | S    |
| Lamycinus coeculus                          | Chilopoda  | Coleoptera |          | Europe                                  | symphylans                      | 1995 | S    |
| Lariophagus distinguendus                    | Hymenoptera |         |          | Europe                                  | coleopterans                    | 1995 | S    |
| Leis (Harmonia) dimidiata                   | Coleoptera |         |          | Europe                                  | aphids                          | 1995 | S    |
| Leminia biplagiata                          | Coleoptera | Coleoptera |          | Asia                                    | aphids, whiteflies              | 1998 | S    |
| Leptomastidea abnormis                      | Hymenoptera |         |          | Europe, North America                   | pseudococcids                   | 1984 | S    |
| Leptomastix algirica                        | Hymenoptera |         |          | Europe                                  | pseudococcids                   | 2011 | S    |
| Leptomastix dactylopii                      | Hymenoptera |         |          | Europe, Africa North, North & Latin America | pseudococcids   | 1984 | M    |
| Leptomastix epona                           | Hymenoptera |         |          | Europe                                  | pseudococcids                   | 1992 | S    |
| Species Name | Class | Continent | Region | Hosts | Year | Status |
|--------------|-------|-----------|--------|-------|------|--------|
| Leptomastix histrio | Hymenoptera | Europe | | pseudococcids | 1995 | S |
| Lepinotila heterotoma | Hymenoptera | Europe | | dipterans | 2007 | S |
| Lixophaga diatraea | Diptera | Latin America | | lepidopterans | 1980 | L |
| Lydella jalisco | Diptera | Latin America | | lepidopterans | 1996 | S |
| Lydella minense | Diptera | Latin America | | coleopterans | 1990 | L |
| Lysiphlebus fabarum | Hymenoptera | Europe | | aphids | 1990 | S |
| Lysiphlebus testaceipes | Hymenoptera | Europe | | aphids | 1990 | S |
| Macrocentrus prolificus | Hymenoptera | Latin America | | lepidopterans | 2005 | S |
| Macrocheles robustulus | Acari | Europe | | dipterans, thrips, lepidopterans | 2006 | L |
| Macrolophus caliginosus | Hemiptera | Europe, Africa, North America, Asia | | whiteflies, lepidopterans | 2005 | M |
| Macrolophus pygmaeus (nubilis) | Hemiptera | Europe, Africa North & South | | whiteflies | 1994 | L |
| Mallada basalis | Neuroptera | Asia | | aphids, thrips, etc. | 2000 | L |
| Mallada signata | Neuroptera | Australia | | aphids, thrips, lepidopterans, mealybugs, whiteflies, etc. | 2000 | L |
| Mantis religiosa | Mantodea | North America | | many pests | 1970 | S |
| Megastigmus brevivalvus | Hymenoptera | Australia | | hymenopterans | 1995 | S |
| Megastigmus trisulcus | Hymenoptera | Australia | | hymenopterans | 1995 | S |
| Menochilus sexmaculatus | Coleoptera | Asia | | aphids, whiteflies | 2010 | S |
| Mesoseius longipes | Acari | North America | | mites | 1989 | L |
| Metagonistylum minense | Diptera | Latin America | | lepidopterans | 1980 | S |
| Metaphycus flavus | Hymenoptera | Europe, North America | | coccids | 1995 | S |
| Metaphycus helvolus | Hymenoptera | Europe, Australia | | coccids | 1943 | S |
| Metaphycus lounsburyi (bartletti) | Hymenoptera | Europe, Australia, North America | | coccids | 1902 | S |
| Metaphycus stanleyi | Hymenoptera | Europe | | coccids | 1990 | S |
| Metaphycus swirskii | Hymenoptera | Europe | | coccids | 1995 | S |
| Metaphycus spp Peru | Hymenoptera | Latin America | | coccids | 1990 | S |
| Metaseiulus occidentalis | Acari | Europe | | mites | 1985 | S |
| Meteorus gyrator | Hymenoptera | Europe | | lepidopterans | 2005 | S |
| Micromus angulatus | Neuroptera | Europe, South Korea | | aphids | 2005 | S |
| Micromus tasmaniae | Neuroptera | Australia, New Zealand | | aphids, thrips, lepidopterans, whiteflies, etc | 2000 | S |
| Micromus variegatus | Neuroptera | North America | | aphids | 2010 | L |
| Microterys flavus | Hymenoptera | Europe | | coccids | 1987 | S |
| Microterys nietneri | Hymenoptera | Europe | | coccids | 1987 | S |
| Common Name                      | Scientific Name             | Taxonomy            | Distribution                                                                 | Order | Year | Notes                        |
|---------------------------------|-----------------------------|---------------------|------------------------------------------------------------------------------|-------|------|------------------------------|
| Muscidifurax raptor             | Hymenoptera                | Europe, Africa South, North & Latin America | dipterans                                                                      | 1970  | L    |                              |
| Muscidifurax raptorellus        | Hymenoptera                | Europe, Africa North, North America       | dipterans                                                                      | 1970  | M    |                              |
| Muscidifurax zaraptor           | Hymenoptera                | Europe, North America, Latin America       | dipterans                                                                      | 1982  | M    |                              |
| Nabis pseudoferus ibericus      | Hemiptera                  | Europe              | lepidopterans                                                                 | 2009  | S    |                              |
| Nasonia vitripennis             | Hymenoptera                | Europe              | dipterans                                                                      | 1970  | M    |                              |
| Necremnus artynes               | Hymenoptera                | Europe              | lepidopterans                                                                 | 2010  | S    |                              |
| Neochrysocharis formosa          | Hymenoptera                | Asia                | dipterans                                                                      | 1990  | M    |                              |
| Neodryinus typhlocybae          | Hymenoptera                | Europe              | planthoppers                                                                   | 2007  | S    |                              |
| Neoseiulus (Amblyseius) barkeri | Acari                       | Europe, Latin America | thrips                                                                        | 1981  | S    |                              |
| Neoseiulus (Amblyseius) californicus | Acari               | Europe, Africa North & South, North & Latin America, Asia | mites                                                                          | 1985  | L    |                              |
| Neoseiulus (Amblyseius) cucumeris | Acari                   | Europe, Africa North & South, North & Latin America, Asia, Australia, New Zealand | thrips, mites                                                                  | 1985  | L    |                              |
| Neoseiulus (Amblysetus) fallaxis | Acari                    | Europe, North America | mites                                                                          | 1997  | S    |                              |
| Neoseiulus longispinosus        | Acari                       | Latin America       | mites                                                                          | 2005  | S    |                              |
| Neoseiulus wearnei              | Acari                       | Australia           | mites                                                                          | 2000  | S    |                              |
| Nephus includens                | Coleoptera                 | Europe              | pseudococcids                                                                 | 2000  | S    |                              |
| Nephus quadriracmaculatus       | Coleoptera                 | Europe              | aphids, pseudococcids                                                          | 2005  | S    |                              |
| Nephus reunioni                 | Coleoptera                 | Europe              | pseudococcids                                                                 | 1990  | S    |                              |
| Nesidiocoris tenuis             | Hemiptera                  | Europe, Africa North, Asia, North America  | whiteflies, lepidopterans                                                      | 2003  | L    |                              |
| Olla abdominalis (=v-nigrans)   | Coleoptera                 | North & Latin America | aphids, hemipterans                                                            | 1990  | S    |                              |
| Ooencyrtus kuvanae              | Hymenoptera                | Europe              | lepidopterans                                                                 | 1923  | S    |                              |
| Ooencyrtus pityocampae          | Hymenoptera                | Europe              | lepidopterans                                                                 | 1997  | S    |                              |
| Ophelosia crawfordi             | Hymenoptera                | Europe              | coccids, pseudococcids, margarodids                                           | 1980  | S    |                              |
| Ophyra aeneascens               | Diptera                    | Europe, North America | dipterans                                                                      | 1995  | S    |                              |
| Opilus pallipes                 | Hymenoptera                | Europe              | dipterans                                                                      | 1980  | S    |                              |
| Orgilus obscurator              | Hymenoptera                | Latin America       | lepidopterans                                                                 | 1990  | L    |                              |
| Orius albipennis                | Hemiptera                  | Europe              | thrips                                                                         | 1993  | S    |                              |
| Orius armatus                   | Hemiptera                  | Australia           | thrips                                                                         | 1990  | S    |                              |
| Orius insidiosus                | Hemiptera                  | Europe              | thrips                                                                         | 1991 - 2000 | L |                              |
| Orius insidiosus                | Hemiptera                  | North & Latin America, Asia               | thrips, aphids, whiteflies                                                      | 1985  | L    |                              |
| Orius laevigatus                | Hemiptera                  | Europe, Africa North, Asia, North America  | thrips                                                                         | 1993  | L    |                              |
| Orius majorculus                | Hemiptera                  | Europe, North America | thrips                                                                         | 1993  | M    |                              |
| Orius minutus                   | Hemiptera                  | Europe, Asia        | thrips                                                                         | 1993  | S    |                              |
| Species                  | Order          | Region          | Predators          | Years     | Taxon  |
|-------------------------|----------------|-----------------|--------------------|-----------|--------|
| Orius sauteri           | Hemiptera      | Asia            | aphids, mites, thrips | 2005      | M      |
| Orius strigicollis      | Hemiptera      | Asia            | thrips             | 2000      | M      |
| Orius tristicolor       | Hemiptera      | Europe          | thrips             | 1995 - 2000 | S      |
| Orius vicinus           | Hemiptera      | New Zealand     | thrips, aphids, mites | 2010      | M      |
| Pachyceroideus vindemiae | Hymenoptera   | Latin America   | dipters            | 1980      | L      |
| Paratheresia claripalpis | Diptera       | Latin America   | lepidopterans      | 1980      | L      |
| Pedobiou s foveolatus   | Hymenoptera    | North America   | coleopterans       | 1980      | S      |
| Pentatjomastix plethoricum | Hymenoptera   | North America   | lepidopterans      | 1980      | S      |
| Peristenus digoneutis   | Hymenoptera    | North America   | Hemipterans        | 1980      | S      |
| Peristenus relictus     | Hymenoptera    | North America   | Hemipterans        | 2001      | L      |
| Pergamasus quisquiliarum | Acari         | Europe          | symphylans         | 2000      | S      |
| Phasmarchabditis hermaphrodita | Nematoda | Europe  | snails             | 1994      | S      |
| Pheidole megacephala    | Hymenoptera    | Latin America   | coleopterans       | 1990      | L      |
| Phytoseiulus finitimus  | Acari          | Europe          | mites              | 2000      | S      |
| Phytoseiulus longipes   | Acari          | Europe, Latin America | mites           | 1990      | S      |
| Phytoseiulus macropilis | Acari          | Europe, North & Latin America | mites | 1980      | L      |
| Phytoseiulus persimilis | Acari          | Europe, Africa North & South, North & Latin America, Asia, Australia, New Zealand | mites | 1968      | L      |
| Picromerus bidens        | Hymenoptera    | Europe          | lepidopterans      | 1990      | S      |
| Podisus maculiventris   | Hymenoptera    | Europe, North America | coleopterans, lepidopterans | 1996      | S      |
| Podisus nigrispinus     | Hymenoptera    | Latin America   | lepidopterans      | 1990      | S      |
| Podisus sp               | Hymenoptera    | Latin America   | lepidopterans      | 1985      | S      |
| Praon sp                 | Hymenoptera    | Latin America   | aphids             | 1980      | S      |
| Praon volucre            | Hymenoptera    | Europe          | aphids             | 1990      | S      |
| Propylaea japonica      | Coleoptera     | Asia            | aphids             | 2014      | S      |
| Propylaea quatuordecimpunctata | Coleoptera | Europe          | aphids             | 1995      | S      |
| Prorops nasuta           | Hymenoptera    | Latin America   | coleopterans       | 1990      | L      |
| Prospaltella spp         | Hymenoptera    | Latin America   | diaspids           | 1990      | M      |
| Pseudaphycus angelicus  | Hymenoptera    | Europe          | pseudococcids      | 1990      | S      |
| Pseudaphycus fluidulus  | Hymenoptera    | Europe, Latin America | pseudococcids   | 1990      | S      |
| Pseudaphycus maculipennis | Hymenoptera   | Europe          | pseudococcids      | 1980      | S      |
| Psyttalia concolor      | Hymenoptera    | Europe          | dipters            | 1968 - 2000 | S      |
| Rhyzobius chrysoameloides| Coleoptera     | Europe          | coccids            | 1980      | S      |
| Rhyzobius forestieri     | Coleoptera     | Europe          | coccids            | 1980      | S      |
| Scientific Name                  | Class                | Common Name               | Location                          | Hosts                                      | Year | Code |
|---------------------------------|----------------------|---------------------------|-----------------------------------|--------------------------------------------|------|------|
| Rhyzobius (Lindorus) lophanthae  | Coleoptera           | Europe, North & Latin America | coccids                          | 1980                                       |      | S    |
| Rodolia cardinalis              | Coleoptera           | Europe, Asia              | margarodids                       | 1990                                       |      | S    |
| Rumina decollata                | Mollusca             | Europe, North America     | molluscs                          | 1990                                       |      | S    |
| Saniosusulus nudus              | Acari                | Europe                    | diaspids                          | 1990                                       |      | S    |
| Scolothrips sexmaculatus        | Thysanoptera         | Europe, North America     | mites, thrips                     | 1990                                       |      | S    |
| Scutellista caerulea (cyanea)   | Hymenoptera          | Europe                    | coccids                           | 1990                                       |      | S    |
| Scymnus loewii                  | Coleoptera           | New Zealand               | aphids                            | 1995                                       |      | S    |
| Scymnus rubromaculatus          | Coleoptera           | Europe                    | aphids                            | 1990                                       |      | S    |
| Spalangia cameroni              | Hymenoptera          | Europe, Africa North, North & Latin America | dipterans                       | 1970                                       |      | S    |
| Spalangia endius                | Hymenoptera          | North & Latin America, Australia | dipterans                       | 1970                                       |      | L    |
| Spalangia gemini                | Hymenoptera          | North America             | dipterans                          | 1980                                       |      | S    |
| Spalangia nigroaenea            | Hymenoptera          | North & Latin America     | dipterans                          | 1980                                       |      | S    |
| Sphaerophoria rupePELLi         | Diptera              | Europe                    | aphids                            | 2015                                       |      | S    |
| Stagmomantis carolina           | Mantodea             | North America             | many pest species                 | 1990                                       |      | S    |
| Steinerema carpocapsae          | Nematoda             | Europe, Africa North, North & Latin America, Australia, New Zealand | coleopterans, lepidopterans          | 1984                                       |      | M    |
| Steinerema glasera              | Nematoda             | Europe, North America, Asia | coleopterans                     | 1990                                       |      | S    |
| Steinerema feltiae              | Nematoda             | Europe, Africa North & South, North & Latin America, Australia, New Zealand | coleopterans, sciarids, dipteran leafminers | 1984                                       |      | L    |
| Steinerema kraussei             | Nematoda             | Europe, North America     | coleopterans                       | 2000                                       |      | S    |
| Steinerema riobrave              | Nematoda             | North America             | lepidopterans, coleopterans        | 2000                                       |      | S    |
| Steinerema scapterisci          | Nematoda             | North America             | orthopterans                      | 1990                                       |      | S    |
| Stethorus punctillum            | Coleoptera           | Europe, North America, Asia | mites                           | 1984                                       |      | S    |
| Stethorus punctipes             | Coleoptera           | North America             | mites                             | 1980                                       |      | S    |
| Stethorus sp                    | Coleoptera           | Latin America             | mites                             | 1995                                       |      | S    |
| Stratiolaelaps (Hypoaspis) miles| Acari                | Europa, North America, Australia, New Zealand | sciarids, thrips               | 1995                                       |      | L    |
| Stratiolaelaps (Hypoaspis) scimitus | Acari              | Europa, North & Latin America, Australia, New Zealand | sciarids | 1990                                       |      | L    |
| Sympherobius barbirei           | Neuroptera           | North America             | pseudococcids, aphids etc         | 1980                                       |      | L    |
| Sympherobius fallax             | Neuroptera           | Europe                    | pseudococcids                     | 1994                                       |      | S    |
| Sympherobius maculipennis       | Neuroptera           | Latin America             | pseudococcids                     | 1990                                       |      | S    |
| Sympherobius sp                 | Neuroptera           | Latin America             | whiteflies                        | 1995                                       |      | S    |
| Synacra paupera                 | Hymenoptera          | Europe                    | sciarids                          | 2000                                       |      | S    |
| Synoipeas sp                    | Hymenoptera          | Latin America             | dipterans                         | 1990                                       |      | S    |
| Tamarixia radiata               | Hymenoptera          | Latin America             | psyllids                          | 2010                                       |      | L    |
| Genus                     | Order       | Suborder                        | Hosts                      | Year  | Location       |
|--------------------------|-------------|---------------------------------|----------------------------|-------|----------------|
| Tamarixia triaoz          | Hymenoptera | North & Latin America            | psyllids                   | 2001  | L              |
| Telenomus podisi          | Hymenoptera | Latin America                   | hemipterans                | 2004  | M              |
| Telenomus remus           | Hymenoptera | Latin America                   | lepidopterans              | 1990  | L              |
| Telenomus sp              | Hymenoptera | Latin America                   | lepidopterans              | 1990  | S              |
| Tenodera aridifolia sinensis | Mantodea   | North America                   | many pest species          | 1990  | S              |
| Tetracnemoidea brevicornis | Hymenoptera | Europe                          | pseudococcids, margarodids | 1990  | S              |
| Tetracnemoidea peregrina | Hymenoptera | Europe                          | pseudococcids, margarodids | 1990  | S              |
| Tetrastichus coeruleus (asparagi) | Hymenoptera | Europe                          | coleopterans               | 2000  | S              |
| Tetrastichus hagenowi    | Hymenoptera | Asia                            | cockroaches                | 1980  | S              |
| Tetrastichus howardii     | Hymenoptera | Latin America                   | lepidopterans              | 1995  | S              |
| Thripobius semiluteus     | Hymenoptera | Europe, North & Latin America, Australia | thrips                   | 1995  | S              |
| Thysphiodromus pyri       | Acari       | Latin America Chile             | mites                      | 2000  | M              |
| Transeius (=Amblyseius)montdorensis | Acari | Europe                          | thrips, whiteflies, tarsonomids | 2004  | S              |
| Trichogramma achaeae      | Hymenoptera | Europe                          | lepidopterans              | 2012  | M              |
| Trichogramma atopovirilia | Hymenoptera | Latin America                   | lepidopterans              | 1990  | S              |
| Trichogramma bactrae      | Hymenoptera | Latin America, Asia             | lepidopterans              | 1980  | M              |
| Trichogramma bournieri    | Hymenoptera | Africa South                    | lepidopterans              | 2001  | S              |
| Trichogramma brassicae (= maidis) | Hymenoptera | Europe, North America          | lepidopterans              | 1980  | S              |
| Trichogramma cacoeciae    | Hymenoptera | Europe, Latin America           | lepidopterans              | 1980  | S              |
| Trichogramma carverae     | Hymenoptera | Australia                       | lepidopterans              | 1990  | L              |
| Trichogramma confusum (=chilonus) | Hymenoptera | Asia, Australia                 | lepidopterans              | 1970  | L              |
| Trichogramma dendrolimi   | Hymenoptera | Europe, Asia                    | lepidopterans              | 1950  | L              |
| Trichogramma embryophagum | Hymenoptera | Europe                          | lepidopterans              | 1994  | M              |
| Trichogramma euproctidis  | Hymenoptera | Europe                          | lepidopterans              | 1980  | M              |
| Trichogramma evanescens   | Hymenoptera | Europe, Africa North, Asia      | lepidopterans              | 1975  | L              |
| Trichogramma exiguum      | Hymenoptera | Latin America                   | lepidopterans              | 1990  | L              |
| Trichogramma fuentesi     | Hymenoptera | Latin America                   | lepidopterans              | 1990  | S              |
| Trichogramma galloi       | Hymenoptera | Latin America                   | lepidopterans              | 1980  | L              |
| Trichogramma japonicum    | Hymenoptera | Asia                            | lepidopterans              | 1990  | S              |
| Trichogramma minutum      | Hymenoptera | North America                   | lepidopterans              | 1970  | S              |
| Trichogramma nerudai      | Hymenoptera | Latin America                   | lepidopterans              | 1990  | S              |
| Trichogramma ostrinia     | Hymenoptera | North America, Asia             | lepidopterans              | 1980  | S              |
| **Trichogramma pintoi**  | Hymenoptera | **Europe, Latin America**  | lepidopterans | 1990 | M |
| **Trichogramma platneri**  | Hymenoptera | North & **Latin America**  | lepidopterans | 1990 | S |
| **Trichogramma pretiosum**  | Hymenoptera | North & Latin America, Australia  | lepidopterans | 1974 | L |
| **Trichogrammatoides cryptophlebiae**  | Hymenoptera | **Africa South**, Australia  | lepidopterans | 1990 | L |
| **Typhlodromus athiaseae**  | Acari | Europe  | mites | 1995 | S |
| **Trissolcus basalis**  | Hymenoptera | **Latin America**  | Hemipterans | 1995 | S |
| **Typhlodromus doreenae**  | Acari | Europe  | mites | 2003 | S |
| **Typhlodromus occidentalis**  | Acari | **Australia**  | mites | 1970 | M |
| **Typhlodromus pyri**  | Acari | Europe, **Australia**  | mites | 1990 | S |
| **Typhlodromips montdorensis**  | Acari | Europe, Australia  | thrips, mites | 2003 | L |
| **Urolepis rufipes**  | Hymenoptera | North America  | diptera | 1990 | S |
| **Wollastoniella rotunda**  | Hemiptera | Asia  | thrips | 2005 | S |
| **Xenostigmus bifasciatus**  | Hymenoptera | **Latin America**  | aphids | 2002 | S |
| **Xylocoris flavipes**  | Hemiptera | **North America**  | coleopterans | 2000 | S |

Key: Market value: L = large (hundred thousand to millions individuals sold per week), M = medium (ten thousand to a hundred thousand individuals sold per week), S = small (hundreds to a few thousand individuals sold per week). In case of doubt, when numbers sold per week could not be estimated from published material, the market value was rated as S. The authors would appreciate corrections and updates of this table. Africa North = North of Sahara; Africa South = South of Sahara; North America = Canada + USA; Latin America = Caribbean, Central and South America. Grey shaded natural enemies: no longer in use.