

Supplement 1: List of species and location of populations included in analyses

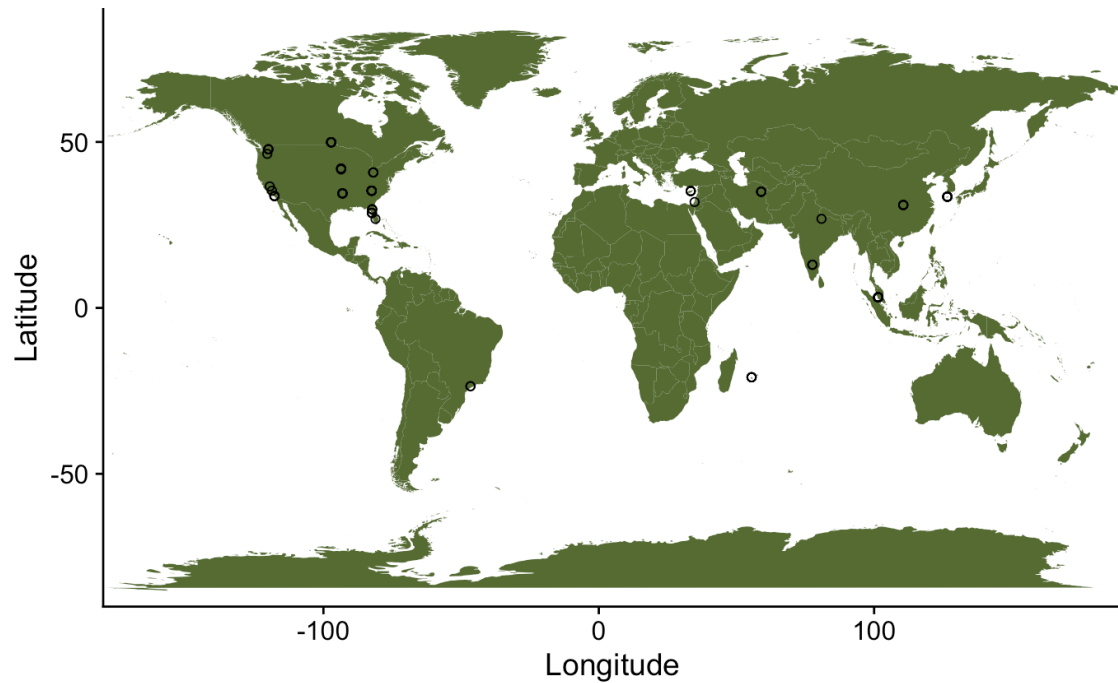


Figure S1. Location of study populations in the analytical data set. Figure generated using the R package “maps”¹.

Table S1. List of 26 species constituting the analytical data set.

Species	family
<i>Herpetogramma phaeopteralis</i>	Crambidae
<i>Chilo sacchariphagus</i>	Crambidae
<i>Keiferia lycopersicella</i>	Gelechiidae
<i>Ascotis selenaria</i>	Geometridae
<i>Marmara gulosa</i>	Gracillariidae
<i>Spalgis epius</i>	Lycaenidae
<i>Mamestra configurata</i>	Noctuidae
<i>Peridroma saucia</i>	Noctuidae
<i>Chilo auricilius</i>	Noctuidae
<i>Lacanobia subjuncta</i>	Noctuidae

<i>Spodoptera exigua</i>	Noctuidae
<i>Cerconota anonella</i>	Oecophoridae
<i>Ectomyelois ceratoniae</i>	Phycitidae
<i>Ephestia figulilella</i>	Phycitidae
<i>Homadaula anisocentra</i>	Plutellidae
<i>Metisa plana</i>	Psychidae
<i>Pteroma pendula</i>	Psychidae
<i>Elasmopalpus lignosellus</i>	Pyralidae
<i>Ameyelois transitella</i>	Pyralidae
<i>Orthopygia glaucinalis</i>	Pyralidae
<i>Lista haraldusalis</i>	Pyralidae
<i>Rhyacionia frustrana</i>	Tortricidae
<i>Ancylis comptana</i>	Tortricidae
<i>Episimus utilis</i>	Tortricidae
<i>Argyrotaenia velutinana</i>	Tortricidae
<i>Cydia pomonella</i>	Tortricidae

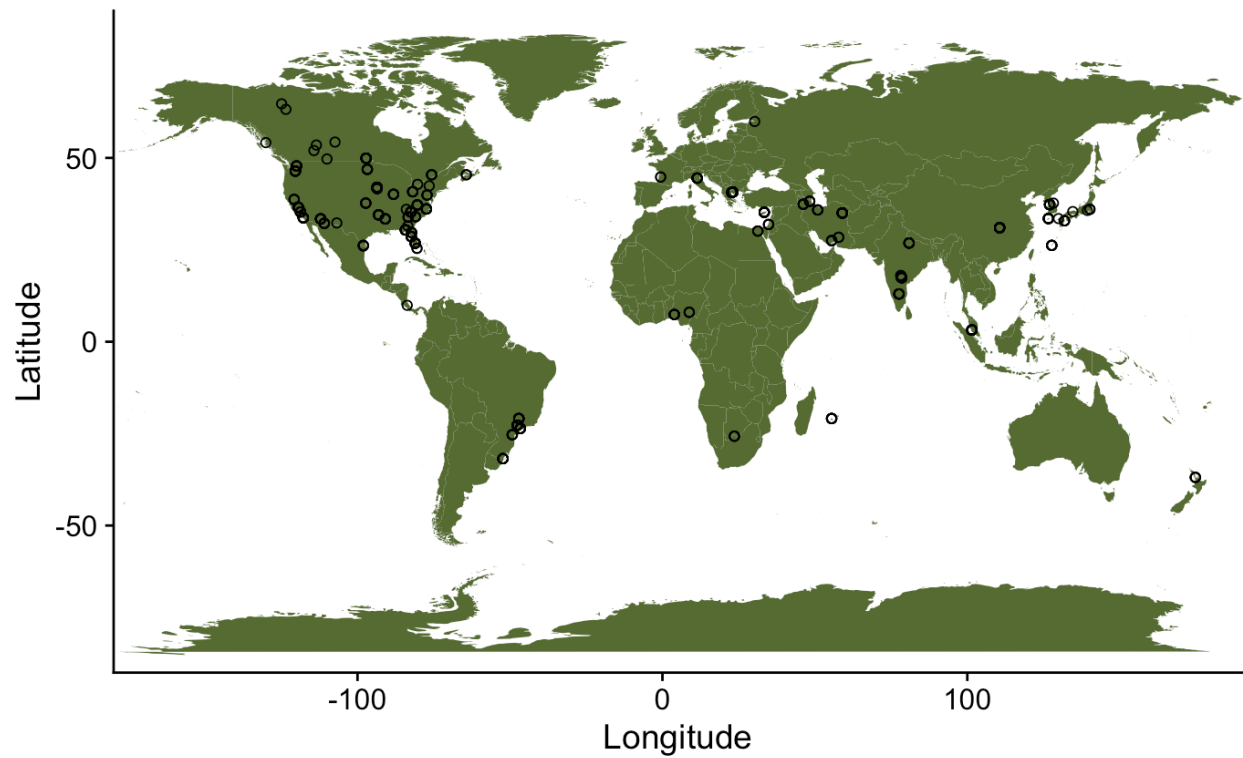


Figure S2. Location of study populations included in the full data set (analysis of this data set is reported in supplement 2). Figure generated using the R package “maps”¹.

Table S2. List of 89 species constituting the full data set.

Species	Family
<i>Utethesia ornatrix</i>	Arctiidae
<i>Bedellia somnulentella</i>	Bellelliidae
<i>Carposina sasakii</i>	Carposinidae
<i>Cochylis hospes</i>	Cochylidae
<i>Herpetogramma phaeopteralis</i>	Crambidae
<i>Chilo sacchariphagus</i>	Crambidae
<i>Pediasia trisecta</i>	Crambidae
<i>Diaphania nitidalis</i>	Crambidae

<i>Diaphania indica</i>	Crambidae
<i>Ostrinia nubilalis</i>	Crambidae
<i>Diatraea grandiosella</i>	Crambidae
<i>Palpita nigropunctalis</i>	Crambidae
<i>Neoleucinodes elegantalis</i>	Crambidae
<i>Cnaphalocrocis medinalis</i>	Crambidae
<i>Stenoma catenifer</i>	Elachistidae
<i>Lymantria albescens</i>	Erebidae
<i>Lymantria xyliana</i>	Erebidae
<i>Keiferia lycopersicella</i>	Gelechiidae
<i>Anarsia lineatella</i>	Gelechiidae
<i>Tuta absoluta</i>	Gelechiidae
<i>Pectinophora gossypiella</i>	Gelechiidae
<i>Aproaerema modicella</i>	Gelechiidae
<i>Phthorimaea operculella</i>	Gelechiidae
<i>Ascotis selenaria</i>	Geometridae
<i>Marmara gulosa</i>	Gracillariidae
<i>Phyllonorycter blancardella</i>	Gracillariidae
<i>Spalgis epius</i>	Lycaenidae
<i>Lycaeides argyrognomom</i>	Lycaenidae
<i>Mamestra configurata</i>	Noctuidae
<i>Peridroma saucia</i>	Noctuidae
<i>Argyrogramma albostriata</i>	Noctuidae
<i>Chilo auricilius</i>	Noctuidae
<i>Sesamia nonagrioides</i>	Noctuidae
<i>Spodoptera cosmioides</i>	Noctuidae
<i>Lacanobia subjuncta</i>	Noctuidae
<i>Spodoptera exigua</i>	Noctuidae
<i>Panolis flammea</i>	Noctuidae
<i>Heliothis subflexa</i>	Noctuidae
<i>Heliothis virescens</i>	Noctuidae

<i>Heliothis zea</i>	Noctuidae
<i>Hypantria cunea</i>	Noctuidae
<i>Leucania separata</i>	Noctuidae
<i>Pseudaletia unipuncta</i>	Noctuidae
<i>Simyra henrici</i>	Noctuidae
<i>Trichoplusia ni</i>	Noctuidae
<i>Egira curialis</i>	Noctuidae
<i>Spodoptera litura</i>	Noctuidae
<i>Naranga aenescens</i>	Noctuidae
<i>Sesamia cretica</i>	Noctuidae
<i>Anticarsia gemmatalis</i>	Noctuidae
<i>Inachis io</i>	Nymphalidae
<i>Danaus plexippus</i>	Nymphalidae
<i>Cerconota anonella</i>	Oecophoridae
<i>Atrophaneura alcinous</i>	Papilionidae
<i>Sericinus montela</i>	Papilionidae
<i>Ectomyelois ceratoniae</i>	Phycitidae
<i>Ephestia calidella</i>	Phycitidae
<i>Ephestia figulilella</i>	Phycitidae
<i>Homadaula anisocentra</i>	Plutellidae
<i>Plutella xylostella</i>	Plutellidae
<i>Metisa plana</i>	Psychidae
<i>Pteroma pendula</i>	Psychidae
<i>Diatraea saccharalis</i>	Pyralidae
<i>Dioryctria amatella</i>	Pyralidae
<i>Ameyelois transitella</i>	Pyralidae
<i>Cactoblastis cactorum</i>	Pyralidae
<i>Maruca vitrata</i>	Pyralidae
<i>Euzopherodes vapidella</i>	Pyralidae
<i>Elasmopalpus lignosellus</i>	Pyralidae
<i>Orthopygia glaucinalis</i>	Pyralidae

<i>Hypocosmia pyrochroma</i>	Pyralidae
<i>Lista haraldusalis</i>	Pyralidae
<i>Cadra cautella</i>	Pyralidae
<i>Corcyra cephalonica</i>	Pyralidae
<i>Plodia interpunctella</i>	Pyralidae
<i>Diatraea lineolata</i>	Pyralidae
<i>Hypsipyla grandella</i>	Pyralidae
<i>Attacus ricini</i>	Saturnidae
<i>Platynota idaeusalis</i>	Tortricidae
<i>Rhyacionia frustrana</i>	Tortricidae
<i>Ancylis comptana</i>	Tortricidae
<i>Cydia pomonella</i>	Tortricidae
<i>Episimus utilis</i>	Tortricidae
<i>Ctenopseustis obliquana</i>	Tortricidae
<i>Adoxophyes orana</i>	Tortricidae
<i>Choristoneura fumiferana</i>	Tortricidae
<i>Argyrotaenia velutinana</i>	Tortricidae
<i>Croesia curvalana</i>	Tortricidae
<i>Lobesia botrana</i>	Tortricidae

References

1. Becker OScbRA, Minka ARWRvbRBEBTP, Deckmyn. A (2022). `_maps`: Draw Geographical Maps_. R package version 3.4.1, <https://CRAN.R-project.org/package=_maps>.