	Acleris comariana (secondary target)	Acleris flavivittana (non-target)	Acleris gloverana (non-target)	Acleris hastiana (non-target)	Acleris holmiana (non-target)	Acleris minuta (non-target)	Acleris nivisellana (non-target)	Acleris robinsonana (non-target)	Acleris senescens (non-target)	Acleris variana (non-target)	Acleris variegana (non-target)	Acleris spp.	Adoxophyes furcatana (non-target)	Adoxophyes negundana (non-target)	Adoxophyes orana (primary target)	Amorbia cuneana (non-target)	Amorbia emigratella (non-target)	Archips argyrospila (non-target)	Archips cerasivorana (non-target)	Archips crataegana (secondary target)	Archips fuscocupreanus (secondary target)	Archips grisea (non-target)	Archips mortuana (non-target)	Archips podana (primary target)	Archips purpurana (non-target)	Archips rosana (non-target)	Archips semiferanus (non-target)	Archips xylosteana (primary target)	Archips spp.	Argyrotaenia franciscana (non-target)	Argyrotaenia ljungiana (secondary target)	Argyrotaenia mariana (non-target)	Argyrotaenia quadrifasciana (non-target)	Argyrotaenia quercifoliana (non-target)	Argyrotaenia velutinana (non-target)
Is the moth a tortricid?																																			
Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Unsure	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Skip to tortricid characters (advanced users only)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Family level characters																																			
Antennae:clubbed																																			
Antennae:filiform (threadlike)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Antennae:pectinate (feathery)																																			
Antennae:other																																			
Labial palpi:reduced or absent																																			
Labial palpi:strongly upcurved																																			
Labial palpi:moderate, upcurved																																			
Labial palpi:short, weak upcurve																																			
Labial palpi:porrect (beaklike)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Labial palpi:bristles on 2nd seg.																																			
Maxillary palpi:minute or absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Maxillary palpi:conspicuous																																			
Proboscis:reduced or absent																																			
Proboscis:scaled at base																																			
Proboscis:unscaled	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Chaetosema:absent																																			
Chaetosema:present	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Forewing length (FWL)# min	5	7.5	8	7.5	5.5	6.5	6	8	10	7.5	7	5	7.5	7.5	7	10	8	6	7.5	9	7	7.5	7	10	8.5	7	8.5	7	6	6	5.5	7	6.5	7.5	5.5
Forewing length (FWL)# max	8	10	10.5	12	8	9.5	7.5	9	12.5	9.5	10	14	10.5	9.5	11	17.5	12	12	12	13	12.5	11	9	12	12.5	10.5	11.5	11	15	10	8.5	10	8.5	11.5	8
Wing shape:longer than wide	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Wing shape:broadly triangular																																			
Tympana:absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Tympana:on thorax																																			
Tympana:on abdomen																																			
Choose the moth's origin (restricts non-targets only)																																			
Northeast	?	x		x		x	x	x		x	x	x	x	x	?			x	x	?	x	x	x	?	x	x	x	?	x		?	x	x	x	x
Southeast	?	x				x						x	x	x	?		x	x	x	?	?	x	x	?	x		x	?	x		?	x	x	x	x
Midwest	?			x		x	x	x		x		x	x	x	?			x	x	?	?	x	x	?	x		x	?	x		?	x	x	x	x
Mountain West	?		x	x			x	x		x		x		x	?	x		x	x	?	?	x		?			x	?	x		?				
Pacific Northwest	x		x	x	x		x	x	x		x	x			?	x		x	x	?	x			x		x		?	x	x	?				
California	?		x	x			x	x	x		x	x			?	x	x	x	x	?	?			?				?	x	x	?				
Southwest	?											x			?	x	x	x		?	?	x		?			x	?	x		?				
Unknown	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Exotic (not USA)	x			x	x						x	x			x					x	x			x		x		x	x		x				
Choose the moth's sex																																			
male	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
female	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
unknown	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Head																																			
Labial palpi:short / moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Labial palpi:long																x																			
Ocelli:present	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ocelli:absent																x	x																		
Antennae:2 rows / seg.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Antennae:1 row / seg.																																			
Wings																																			
Forewing length (FWL)# min	5	7.5	8	7.5	5.5	6.5	6	8	10	7.5	7	5	7.5	7.5	7	10	8	6	7.5	9	7	7.5	7	10	8.5	7	8.5	7	6	6	5.5	7	6.5	7.5	5.5
Forewing length (FWL)# max	8	10	10.5	12	8	9.5	7.5	9	12.5	9.5	10	14	10.5	9.5	11	17.5	12	12	12	13	12.5	11	9	12	12.5	10.5	11.5	11	15	10	8.5	10	8.5	11.5	8
Forewing costal fold (male):present													x	x	x			x	x	x	x	x	x	x	x	x	x	x	x						
Forewing costal fold (male):absent	x	x	x	x	x	x	x	x	x	x	x	x				x	x								?					x	x	x	x	x	x
Forewing pattern:costal spot	x			x	x		x	x			x	x																				x			
Forewing pattern:dark apical half			x	x			x	x		x	x	x																							
Forewing pattern:dark brown / black		x		x		x		x				x																							
Forewing pattern:defined ocellus																																			
Forewing pattern:dorsal spot				x			x	x			x	x																							
Forewing pattern:dorsal strigulae																																			
Forewing pattern:reticulations													x	x	?																		x	x	
Forewing pattern:line to apex		x	x	x						x	x	x																							
Forewing pattern:med. fascia / spot															x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x
Forewing pattern:tornal spot																																			
Forewing pattern:unmarked						x			x			x				x	x																		
Forewing pattern:gray or metallic bars																																			
Forewing pattern:median fascia only																																			
Forewing pattern:other	x	x	x	x				x	x	x	x	x				x	x												x						
Hindwing:dk brn, gray, black																																			
Hindwing:brown or gray	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x			x	x	x		x	x	x		
Hindwing:light brown or gray	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x		x
Hindwing:mottled		x		x					x			x				x	x													x	x				
Hindwing:dull orange																																			
Hindwing:brown, yellow apex																					x			x		x		x	x						
Hindwing:orange and black																																			
Hindwing:white													x	x		x	x								x				x	x				x	x
Hindwing:yellow																x	x		x										x						
Hindwing:scale pocket																																			
Male genitalia																																			
Type:Archipini type													x	x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Type:Tortricini type	x	x	x	x	x	x	x	x	x	x	x	x																							
Type:Grapholitini type																																			
Type:Sparganothini type																x	x																		
Type:Other																																			
Archipini type:Adoxophyes													x	x	x																				
Archipini type:Archips																		x	x	x	x	x	x	x	x	x	x	x	x						
Archipini type:Argyrotaenia																														x	x	x	x	x	x
Archipini type:Cacoecimorpha																																			
Archipini type:Choristoneura																																			
Archipini type:Clepsis																																			
Archipini type:Epiphyas																																			
Archipini type:Pandemis																																			
Archipini type:Xenotemna																																			
Adoxophyes:furcatana													x																						
Adoxophyes:negundana														x																					
Adoxophyes:orana															x																				
Archips:argyrospila																		x																	
Archips:cerasivorana																			x																
Archips:crataegana																				x															
Archips:fuscocupreanus																					x														
Archips:grisea																						x													
Archips:mortuana																							x												
Archips:podana																								x											
Archips:purpurana																									x										
Archips:rosana																										x									
Archips:semiferanus																											x								
Archips:xylosteana																												x							
Argyrotaenia:franciscana																														x					
Argyrotaenia:ljungiana																															x				
Argyrotaenia:mariana																																x			
Argyrotaenia:quadrifasciana																																	x		
Argyrotaenia:quercifoliana																																		x	
Argyrotaenia:velutinana																																			x
Clepsis:clemensiana																																			
Clepsis:fucana																																			
Clepsis:melaleucanus																																			
Clepsis:peritana																																			
Clepsis:persicana																																			
Clepsis:spectrana																																			
Clepsis:virescana																																			
Pandemis:cerasana																																			
Pandemis:heparana																																			
Pandemis:lamprosana																																			
Pandemis:limitata																																			
Pandemis:pyrusana																																			
Tortricini type:A. comariana	x																																		
Tortricini type:A. flavivittana		x																																	
Tortricini type:A. gloverana			x																																
Tortricini type:A. hastiana				x																															
Tortricini type:A. holmiana					x																														
Tortricini type:A. minuta						x																													
Tortricini type:A. nivisellana							x																												
Tortricini type:A. robinsonana								x																											
Tortricini type:A. senescens									x																										
Tortricini type:A. variana										x																									
Tortricini type:A. variegana											x																								
Tortricini type:T. viridana																																			
Grapholitini type:Cryptophlebia																																			
Grapholitini type:Cydia / Grapholita																																			
Grapholitini type:Ecdytolopha																																			
Grapholitini type:Gymnandrosoma																																			
Grapholitini type:Thaumatotibia																																			
Cryptophlebia:illepida																																			
Cryptophlebia:ombrodelta																																			
Cydia / Grapholita:C. caryana																																			
Cydia / Grapholita:C. coniferana																																			
Cydia / Grapholita:C. fabivora																																			
Cydia / Grapholita:C. garacana																																			
Cydia / Grapholita:C. latiferreana																																			
Cydia / Grapholita:C. pomonella																																			
Cydia / Grapholita:C. splendana																																			
Cydia / Grapholita:C. toreuta																																			
Cydia / Grapholita:G. delineana																																			
Cydia / Grapholita:G. funebrana																																			
Cydia / Grapholita:G. interstinctana																																			
Cydia / Grapholita:G. molesta																																			
Cydia / Grapholita:G. packardi																																			
Cydia / Grapholita:G. prunivora																																			
Sparganothini type:A. cuneana																x																			
Sparganothini type:A. emigratella																	x																		
Sparganothini type:P. flavedana																																			
Sparganothini type:P. idaeusalis																																			
Sparganothini type:P. stultana																																			
Sparganothini type:S. senecionana																																			
Sparganothini type:S. sulfureana																																			
Sparganothini type:S. tunicana																																			
Other:C. aporema																																			
Other:C. plebejana																																			
Other:C. longana																																			
Other:C. bipenecilia																																			
Other:C. perseana																																			
Other:D. basiplagana																																			
Other:D. fragariana																																			
Other:E. ambiguella																																			
Other:E. formosana																																			
Other:E. hebesana																																			
Other:H. umbrabasana																																			
Other:L. botrana																																			
Other:P. liriodendrana																																			
Other:P. spiraeifoliana																																			
Other:P. viteana																																			
Other:S. ocellana																																			
Female genitalia																																			
Sterigma connected to apophyses anteriores:yes (Tortricinae)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Sterigma connected to apophyses anteriores:no (Olethreutinae)																																			
Ductus bursae length:short			x		x	x	x				x	x				x	x												x	x	x	x		x	x
Ductus bursae length:long	x	x	x	x		x	x	x	x	x		x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	
Ductus bursae structure:straight	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ductus bursae structure:twisted		x		x	x	x		x				x																							
Ductus bursae structure:spiraled																																			
Cestum in ductus bursae:absent	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x													x	x	x	x	x	x
Cestum in ductus bursae:present										x		x						x	x	x	x	x	x	x	x	x	x	x	x						
Signa:absent	x		x							x		x	x	x																					
Signa:1 - bandlike																x	x																		
Signa:1 - bladelike																																			
Signa:1 - daggar-shaped															x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Signa:1 - scobinate patch		x		x	x	x	x	x	x		x	x																							
Signa:1 - small bump																																			
Signa:1 - thornlike													x	x				?											?	x	x				
Signa:1 - variable ridge																																			
Signa:2 - bladelike																																			
Signa:2 - thornlike																																			
Signa:2 - thumblike																																			
Signa:variably sclerotized																																			
Papillae anales:normal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Papillae anales:modified																																			

	Argyrotaenia spp.	Cacoecimorpha pronubana (secondary target)	Choristoneura rosaceana (non-target)	Clepsis clemensiana (non-target)	Clepsis fucana (non-target)	Clepsis melaleucanus (non-target)	Clepsis peritana (non-target)	Clepsis persicana (non-target)	Clepsis spectrana (secondary target)	Clepsis virescana (non-target)	Clepsis spp.	Cnephasia longana (non-target)	Cochylini	Crocidosema aporema (primary target)	Crocidosema plebejana (non-target)	Cryptaspasma bipenecilia (non-target)	Cryptaspasma perseana (secondary target)	Cryptophlebia illepida (secondary target)	Cryptophlebia ombrodelta (secondary target)	Cydia caryana (non-target)	Cydia coniferana (secondary target)	Cydia fabivora (secondary target)	Cydia garacana (non-target)	Cydia latiferreana (non-target)	Cydia pomonella (non-target)	Cydia splendana (secondary target)	Cydia toreuta (non-target)	Cydia spp.	Decodes basiplagana (non-target)	Decodes fragariana (non-target)	Ecdytolopha insiticiana (non-target)	Enarmonia formosana (secondary target)	Endothenia hebesana (non-target)	Epiphyas postvittana (primary target)	Eupoecilia ambiguella (primary target)
Is the moth a tortricid?																																			
Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Unsure	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Skip to tortricid characters (advanced users only)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Family level characters																																			
Antennae:clubbed																																			
Antennae:filiform (threadlike)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Antennae:pectinate (feathery)																																			
Antennae:other																																			
Labial palpi:reduced or absent																																			
Labial palpi:strongly upcurved																																			
Labial palpi:moderate, upcurved																																			
Labial palpi:short, weak upcurve																?	?	?	?	?	?	?	?	?	?	?	?	?			?				
Labial palpi:porrect (beaklike)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Labial palpi:bristles on 2nd seg.																																			
Maxillary palpi:minute or absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Maxillary palpi:conspicuous																																			
Proboscis:reduced or absent																																			
Proboscis:scaled at base																																			
Proboscis:unscaled	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Chaetosema:absent																																			
Chaetosema:present	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Forewing length (FWL)# min	5	6.5	7.5	9.5	6	8.5	4.5	8.5	7	6	4	7.5	4	6.5	5	6.5	10	7	7	5	4.5	7	5.5	6	6.5	6.5	5	4	8	6	9	7	4.5	5	6
Forewing length (FWL)# max	13	11.5	14	11.5	10.5	11	7.5	11	12	9	13	11	20	8	8	11.5	12	11	11.5	7	6.5	11	6.5	9.5	11	10.5	10	13	9	8.5	13.5	9	8.5	12.5	7.5
Wing shape:longer than wide	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Wing shape:broadly triangular																																			
Tympana:absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Tympana:on thorax																																			
Tympana:on abdomen																																			
Choose the moth's origin (restricts non-targets only)																																			
Northeast	x	?	x	x		x	x	x	?	x	x		x	?			?	?	?	x	?	?	x	x	x	?	x	x	x		x	?	x	?	?
Southeast	x	?	x			x	x		?		x		x	?	x	x	?	?	?	x	?	?	x	x	x	?	x	x	x		x	?	x	?	?
Midwest	x	?	x	x		x	x	x	?	x	x		x	?			?	?	?	x	?	?	x	x	x	?	x	x	x		x	?	x	?	?
Mountain West	x	?	x	x			x	x	?	x	x		x	?			?	?	?		?	?		x	x	?	x	x	x	x	x	?		?	?
Pacific Northwest	x	x	x	x			x	x	x	x	x	x	x	?			?	?	?		x	?		x	x	?	x	x	x	x	x	x	x	?	?
California	x	x	x	x	x		x	x	?	x	x	x	x	?	x		?	?	?		?	?		x	x	?	x	x	x	x	x	?	x	x	?
Southwest	x	?	x	x	x		x		?	x	x		x	x	x	x	?	?	?	x	?	?	x	x	x	?	x	x	x		x	?	x	?	?
Unknown	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Exotic (not USA)	x	x					x		x		x	x	x	x	x	x	x	x	x		x	x			x	x		x				x		x	x
Choose the moth's sex																																			
male	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
female	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
unknown	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Head																																			
Labial palpi:short / moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Labial palpi:long																																			
Ocelli:present	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ocelli:absent																																			
Antennae:2 rows / seg.	x	x	x	x	x	x	x	x	x	x	x	x	x																x	x				x	x
Antennae:1 row / seg.														x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x		
Wings																																			
Forewing length (FWL)# min	5	6.5	7.5	9.5	6	8.5	4.5	8.5	7	6	4	7.5	4	6.5	5	6.5	10	7	7	5	4.5	7	5.5	6	6.5	6.5	5	4	8	6	9	7	4.5	5	6
Forewing length (FWL)# max	13	11.5	14	11.5	10.5	11	7.5	11	12	9	13	11	20	8	8	11.5	12	11	11.5	7	6.5	11	6.5	9.5	11	10.5	10	13	9	8.5	13.5	9	8.5	12.5	7.5
Forewing costal fold (male):present			x	x		x		x	x	x	x		x	x																				x	
Forewing costal fold (male):absent	x	x			x		x				x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x
Forewing pattern:costal spot	x							x			x																								
Forewing pattern:dark apical half																																		x	
Forewing pattern:dark brown / black																x	x			x								x					x		
Forewing pattern:defined ocellus														x	x					x			x	x	x	x		x				x			
Forewing pattern:dorsal spot													x																						
Forewing pattern:dorsal strigulae																					x		x			?		x							
Forewing pattern:reticulations	x																																		
Forewing pattern:line to apex																																			
Forewing pattern:med. fascia / spot	x	x	x		x		x	x	x	x	x																							x	
Forewing pattern:tornal spot													x					x	x			x									x				
Forewing pattern:unmarked				x							x	x	x																x	x					
Forewing pattern:gray or metallic bars													x														x	x							
Forewing pattern:median fascia only													x																						x
Forewing pattern:other	x	x				x					x	x	x																x	x				x	x
Hindwing:dk brn, gray, black													x				x	x	x	x	x	x	x	x				x			x	x	x		
Hindwing:brown or gray	x		x		x	x	x	x	x	x	x	x	x	x	x	x		x	x		x	x	x		x	x	x	x	x	x	x		x	x	x
Hindwing:light brown or gray	x		x		x	x	x	x	x	x	x	x	x	x	x	x												x	x	x				x	
Hindwing:mottled	x				x				x	x	x		x																					x	
Hindwing:dull orange																																			
Hindwing:brown, yellow apex			x																																
Hindwing:orange and black		x																																	
Hindwing:white	x			x	x	x				x	x		x																						
Hindwing:yellow											x		x																						
Hindwing:scale pocket																																			
Male genitalia																																			
Type:Archipini type	x	x	x	x	x	x	x	x	x	x	x																							x	
Type:Tortricini type																																			
Type:Grapholitini type																		x	x	x	x	x	x	x	x	x	x	x			x				
Type:Sparganothini type																																			
Type:Other												x	x	x	x	x	x												x	x		x			x
Archipini type:Adoxophyes																																			
Archipini type:Archips																																			
Archipini type:Argyrotaenia	x																																		
Archipini type:Cacoecimorpha		x																																	
Archipini type:Choristoneura			x																																
Archipini type:Clepsis				x	x	x	x	x	x	x	x																								
Archipini type:Epiphyas																																		x	
Archipini type:Pandemis																																			
Archipini type:Xenotemna																																			
Adoxophyes:furcatana																																			
Adoxophyes:negundana																																			
Adoxophyes:orana																																			
Archips:argyrospila																																			
Archips:cerasivorana																																			
Archips:crataegana																																			
Archips:fuscocupreanus																																			
Archips:grisea																																			
Archips:mortuana																																			
Archips:podana																																			
Archips:purpurana																																			
Archips:rosana																																			
Archips:semiferanus																																			
Archips:xylosteana																																			
Argyrotaenia:franciscana																																			
Argyrotaenia:ljungiana																																			
Argyrotaenia:mariana																																			
Argyrotaenia:quadrifasciana																																			
Argyrotaenia:quercifoliana																																			
Argyrotaenia:velutinana																																			
Clepsis:clemensiana				x																															
Clepsis:fucana					x																														
Clepsis:melaleucanus						x																													
Clepsis:peritana							x																												
Clepsis:persicana								x																											
Clepsis:spectrana									x																										
Clepsis:virescana										x																									
Pandemis:cerasana																																			
Pandemis:heparana																																			
Pandemis:lamprosana																																			
Pandemis:limitata																																			
Pandemis:pyrusana																																			
Tortricini type:A. comariana																																			
Tortricini type:A. flavivittana																																			
Tortricini type:A. gloverana																																			
Tortricini type:A. hastiana																																			
Tortricini type:A. holmiana																																			
Tortricini type:A. minuta																																			
Tortricini type:A. nivisellana																																			
Tortricini type:A. robinsonana																																			
Tortricini type:A. senescens																																			
Tortricini type:A. variana																																			
Tortricini type:A. variegana																																			
Tortricini type:T. viridana																																			
Grapholitini type:Cryptophlebia																		x	x																
Grapholitini type:Cydia / Grapholita																				x	x	x	x	x	x	x	x	x							
Grapholitini type:Ecdytolopha																															x				
Grapholitini type:Gymnandrosoma																																			
Grapholitini type:Thaumatotibia																																			
Cryptophlebia:illepida																		x																	
Cryptophlebia:ombrodelta																			x																
Cydia / Grapholita:C. caryana																				x															
Cydia / Grapholita:C. coniferana																					x														
Cydia / Grapholita:C. fabivora																						x													
Cydia / Grapholita:C. garacana																							x												
Cydia / Grapholita:C. latiferreana																								x											
Cydia / Grapholita:C. pomonella																									x										
Cydia / Grapholita:C. splendana																										x									
Cydia / Grapholita:C. toreuta																											x								
Cydia / Grapholita:G. delineana																																			
Cydia / Grapholita:G. funebrana																																			
Cydia / Grapholita:G. interstinctana																																			
Cydia / Grapholita:G. molesta																																			
Cydia / Grapholita:G. packardi																																			
Cydia / Grapholita:G. prunivora																																			
Sparganothini type:A. cuneana																																			
Sparganothini type:A. emigratella																																			
Sparganothini type:P. flavedana																																			
Sparganothini type:P. idaeusalis																																			
Sparganothini type:P. stultana																																			
Sparganothini type:S. senecionana																																			
Sparganothini type:S. sulfureana																																			
Sparganothini type:S. tunicana																																			
Other:C. aporema														x																					
Other:C. plebejana															x																				
Other:C. longana												x																							
Other:C. bipenecilia																x																			
Other:C. perseana																	x																		
Other:D. basiplagana																													x						
Other:D. fragariana																														x					
Other:E. ambiguella																																			x
Other:E. formosana																																x			
Other:E. hebesana																																	x		
Other:H. umbrabasana																																			
Other:L. botrana																																			
Other:P. liriodendrana																																			
Other:P. spiraeifoliana																																			
Other:P. viteana																																			
Other:S. ocellana																																			
Female genitalia																																			
Sterigma connected to apophyses anteriores:yes (Tortricinae)	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x												x	x				x	x
Sterigma connected to apophyses anteriores:no (Olethreutinae)														x	x			x	x	x	x	x	x	x	x	x	x	x			x	x	x		
Ductus bursae length:short	x											x	x		x	x	x	x	x	x	x		x	x	x		x	x	x	x	x	x	x		x
Ductus bursae length:long	x	x	x	x	x	x	x	x	x	x	x			x				x	x	x		x	x			x		x		x	x	x	x	x	
Ductus bursae structure:straight	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ductus bursae structure:twisted						x					x		x	x				x		x	x		x	x	x		x	x	x	x					
Ductus bursae structure:spiraled							x				x																								
Cestum in ductus bursae:absent	x			x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Cestum in ductus bursae:present		x	x	x		x	x				x																								
Signa:absent					x		x				x																			x					
Signa:1 - bandlike																																			
Signa:1 - bladelike																																x	x		
Signa:1 - daggar-shaped	x		x	x		x		x	x	x	x																							x	
Signa:1 - scobinate patch																																			
Signa:1 - small bump		x																																	
Signa:1 - thornlike	x																																		
Signa:1 - variable ridge												x																	x						
Signa:2 - bladelike																																			
Signa:2 - thornlike														x	x			x	x	x	x	x	x	x	x	x	x	x			x				
Signa:2 - thumblike																x	x		x												x				
Signa:variably sclerotized													x																						x
Papillae anales:normal	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x
Papillae anales:modified												x																	x	x					

	Grapholita delineana (non-target)	Grapholita funebrana (primary target)	Grapholita interstinctana (non-target)	Grapholita molesta (non-target)	Grapholita packardi (non-target)	Grapholita prunivora (non-target)	Grapholita spp.	Gymnandrosoma punctidiscanum (non-target)	Henricus umbrabasana (non-target)	Lobesia botrana (primary target)	Pandemis cerasana (secondary target)	Pandemis heparana (secondary target)	Pandemis lamprosana (non-target)	Pandemis limitata (non-target)	Pandemis pyrusana (non-target)	Paralobesia spp. (non-target)	Paralobesia viteana (non-target)	Platynota flavedana (non-target)	Platynota idaeusalis (non-target)	Platynota stultana (non-target)	Platynota spp. (non-target)	Sparganothis senecionana (non-target)	Sparganothis sulfureana (non-target)	Sparganothis tunicana (non-target)	Spilonota ocellana (non-target)	Thaumatotibia leucotreta (primary target)	Tortrix viridana (primary target)	Xenotemna pallorana (non-target)	Not Tortricidae - Gelechioidea	Not Tortricidae - Geometroidea	Not Tortricidae - Noctuoidea	Not Tortricidae - Pyraloidea	Not Tortricidae - Tineoidea	Not Tortricidae - Yponomeutoidea
Is the moth a tortricid?																																		
Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
Unsure	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Skip to tortricid characters (advanced users only)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
Family level characters																																		
Antennae:clubbed																															x			
Antennae:filiform (threadlike)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Antennae:pectinate (feathery)																													x	x	x	x	x	
Antennae:other																															x			
Labial palpi:reduced or absent																																	x	
Labial palpi:strongly upcurved																													x		x		x	
Labial palpi:moderate, upcurved																														x	x		x	x
Labial palpi:short, weak upcurve	?	?	?	?	?	?	?	?																						x	x	x	x	x
Labial palpi:porrect (beaklike)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x
Labial palpi:bristles on 2nd seg.																																	x	
Maxillary palpi:minute or absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x
Maxillary palpi:conspicuous																													x			x	x	x
Proboscis:reduced or absent																															x		x	
Proboscis:scaled at base																													x			x		
Proboscis:unscaled	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x			x
Chaetosema:absent																													x	x	x		x	x
Chaetosema:present	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x		x
Forewing length (FWL)# min	4.5	4	4	5	3.5	4	3	8	7.5	4.5	8	8	8	7	8	4.5	4.5	5	6	4.5	4	7.5	6.5	5.5	5.5	7	8	8.5	6	6	6	4	3	3
Forewing length (FWL)# max	6.5	7.5	6	6.5	5	5.5	9	12	9	8	12	12	12	12	14	8	6	8.5	12.5	9	14	12.5	10	9.5	8	10	11	14	35	60	125	50	30	30
Wing shape:longer than wide	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Wing shape:broadly triangular																														x	x	x	x	
Tympana:absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x
Tympana:on thorax																					x										x			
Tympana:on abdomen																					x									x		x		
Choose the moth's origin (restricts non-targets only)																																		
Northeast	x	?	x	x	x	x	x	x		?	?	?	x	x		x	x	x	x		x		x		x	?	?	x	?	?	?	?	?	?
Southeast		?		x	x	x	x	x		?	?	?		x		x	x	x	x	x	x		x		x	?	?	x	?	?	?	?	?	?
Midwest	x	?	x	x	x	x	x	x		?	?	?		x		x	x	x	x		x		x		x	?	?	x	?	?	?	?	?	?
Mountain West		?		x	x	x	x			?	?	?		x	x	x	x		x		x	x		x	x	?	?	x	?	?	?	?	?	?
Pacific Northwest		?		x	x	x	x			?	x	x			x	x			x		x	x	x	x	x	?	?	x	?	?	?	?	?	?
California		?		x		x	x		x	x	?	?			x	x				x	x	x		x	x	?	?	x	?	?	?	?	?	?
Southwest		?		x		x	x	x		?	?	?				x				x	x	x				?	?	x	?	?	?	?	?	?
Unknown	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Exotic (not USA)	x	x		x			x			x	x	x								x	x				x	x	x		?	?	?	?	?	?
Choose the moth's sex																																		
male	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
female	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
unknown	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Head																																		
Labial palpi:short / moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x		x		x	x	x	x	?	?	?	?	?	?
Labial palpi:long																		x	x	x	x	x	x	x					?	?	?	?	?	?
Ocelli:present	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x		x
Ocelli:absent																														x	x		x	
Antennae:2 rows / seg.									x		x	x	x	x	x			x	x	x	x	x	x	x			x	x	?	?	?	?	?	?
Antennae:1 row / seg.	x	x	x	x	x	x	x	x		x						x	x								x	x			?	?	?	?	?	?
Wings																																		
Forewing length (FWL)# min	4.5	4	4	5	3.5	4	3	8	7.5	4.5	8	8	8	7	8	4.5	4.5	5	6	4.5	4	7.5	6.5	5.5	5.5	7	8	8.5	6	6	6	4	3	3
Forewing length (FWL)# max	6.5	7.5	6	6.5	5	5.5	9	12	9	8	12	12	12	12	14	8	6	8.5	12.5	9	14	12.5	10	9.5	8	10	11	14	35	60	125	50	30	30
Forewing costal fold (male):present																		x	x	x	x								?	?	?	?	?	?
Forewing costal fold (male):absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					x	x	x	x	x	x	x	?	?	?	?	?	?
Forewing pattern:costal spot																													?	?	?	?	?	?
Forewing pattern:dark apical half																						x							?	?	?	?	?	?
Forewing pattern:dark brown / black		x		x	x		x	x																		x			?	?	?	?	?	?
Forewing pattern:defined ocellus	x	x	x	?	x	x	x																		x				?	?	?	?	?	?
Forewing pattern:dorsal spot									x																				?	?	?	?	?	?
Forewing pattern:dorsal strigulae	x		x		x	x	x																						?	?	?	?	?	?
Forewing pattern:reticulations																							x						?	?	?	?	?	?
Forewing pattern:line to apex																													?	?	?	?	?	?
Forewing pattern:med. fascia / spot											x	x	x	x	x			x		x	x	x		x					?	?	?	?	?	?
Forewing pattern:tornal spot																									x	x			?	?	?	?	?	?
Forewing pattern:unmarked																											x	x	?	?	?	?	?	?
Forewing pattern:gray or metallic bars					x		x									x	x												?	?	?	?	?	?
Forewing pattern:median fascia only																																		
Forewing pattern:other																		x	x	x	x	x		x					?	?	?	?	?	?
Hindwing:dk brn, gray, black	x	x	x	x	x	x	x	x								x								x		x			?	?	?	?	?	?
Hindwing:brown or gray		x	x		x	x	x			x	x	x				x	x	x	x		x	x	x	x	x	x	x		?	?	?	?	?	?
Hindwing:light brown or gray							x		x				x	x		x		x	x		x	x	x						?	?	?	?	?	?
Hindwing:mottled																				x									?	?	?	?	?	?
Hindwing:dull orange																		x			x								?	?	?	?	?	?
Hindwing:brown, yellow apex																													?	?	?	?	?	?
Hindwing:orange and black																													?	?	?	?	?	?
Hindwing:white													x	x	x	x												x	?	?	?	?	?	?
Hindwing:yellow									x																			x	?	?	?	?	?	?
Hindwing:scale pocket																										x			?	?	?	?	?	?
Male genitalia																																		
Type:Archipini type											x	x	x	x	x													x						
Type:Tortricini type																											x							
Type:Grapholitini type	x	x	x	x	x	x	x	x																		x								
Type:Sparganothini type																		x	x	x	x	x	x	x										
Type:Other									x	x						x	x								x									
Archipini type:Adoxophyes																																		
Archipini type:Archips																																		
Archipini type:Argyrotaenia																																		
Archipini type:Cacoecimorpha																																		
Archipini type:Choristoneura																																		
Archipini type:Clepsis																																		
Archipini type:Epiphyas																																		
Archipini type:Pandemis											x	x	x	x	x																			
Archipini type:Xenotemna																												x						
Adoxophyes:furcatana																																		
Adoxophyes:negundana																																		
Adoxophyes:orana																																		
Archips:argyrospila																																		
Archips:cerasivorana																																		
Archips:crataegana																																		
Archips:fuscocupreanus																																		
Archips:grisea																																		
Archips:mortuana																																		
Archips:podana																																		
Archips:purpurana																																		
Archips:rosana																																		
Archips:semiferanus																																		
Archips:xylosteana																																		
Argyrotaenia:franciscana																																		
Argyrotaenia:ljungiana																																		
Argyrotaenia:mariana																																		
Argyrotaenia:quadrifasciana																																		
Argyrotaenia:quercifoliana																																		
Argyrotaenia:velutinana																																		
Clepsis:clemensiana																																		
Clepsis:fucana																																		
Clepsis:melaleucanus																																		
Clepsis:peritana																																		
Clepsis:persicana																																		
Clepsis:spectrana																																		
Clepsis:virescana																																		
Pandemis:cerasana											x																							
Pandemis:heparana												x																						
Pandemis:lamprosana													x																					
Pandemis:limitata														x																				
Pandemis:pyrusana															x																			
Tortricini type:A. comariana																																		
Tortricini type:A. flavivittana																																		
Tortricini type:A. gloverana																																		
Tortricini type:A. hastiana																																		
Tortricini type:A. holmiana																																		
Tortricini type:A. minuta																																		
Tortricini type:A. nivisellana																																		
Tortricini type:A. robinsonana																																		
Tortricini type:A. senescens																																		
Tortricini type:A. variana																																		
Tortricini type:A. variegana																																		
Tortricini type:T. viridana																											x							
Grapholitini type:Cryptophlebia																																		
Grapholitini type:Cydia / Grapholita	x	x	x	x	x	x	x																											
Grapholitini type:Ecdytolopha																																		
Grapholitini type:Gymnandrosoma								x																										
Grapholitini type:Thaumatotibia																										x								
Cryptophlebia:illepida																																		
Cryptophlebia:ombrodelta																																		
Cydia / Grapholita:C. caryana																																		
Cydia / Grapholita:C. coniferana																																		
Cydia / Grapholita:C. fabivora																																		
Cydia / Grapholita:C. garacana																																		
Cydia / Grapholita:C. latiferreana																																		
Cydia / Grapholita:C. pomonella																																		
Cydia / Grapholita:C. splendana																																		
Cydia / Grapholita:C. toreuta																																		
Cydia / Grapholita:G. delineana	x																																	
Cydia / Grapholita:G. funebrana		x																																
Cydia / Grapholita:G. interstinctana			x																															
Cydia / Grapholita:G. molesta				x																														
Cydia / Grapholita:G. packardi					x																													
Cydia / Grapholita:G. prunivora						x																												
Sparganothini type:A. cuneana																																		
Sparganothini type:A. emigratella																																		
Sparganothini type:P. flavedana																		x																
Sparganothini type:P. idaeusalis																			x															
Sparganothini type:P. stultana																				x														
Sparganothini type:S. senecionana																						x												
Sparganothini type:S. sulfureana																							x											
Sparganothini type:S. tunicana																								x										
Other:C. aporema																																		
Other:C. plebejana																																		
Other:C. longana																																		
Other:C. bipenecilia																																		
Other:C. perseana																																		
Other:D. basiplagana																																		
Other:D. fragariana																																		
Other:E. ambiguella																																		
Other:E. formosana																																		
Other:E. hebesana																																		
Other:H. umbrabasana									x																									
Other:L. botrana										x																								
Other:P. liriodendrana																x																		
Other:P. spiraeifoliana																x																		
Other:P. viteana																	x																	
Other:S. ocellana																									x									
Female genitalia																																		
Sterigma connected to apophyses anteriores:yes (Tortricinae)									x		x	x	x	x	x			x	x	x	x	x	x	x			x	x						
Sterigma connected to apophyses anteriores:no (Olethreutinae)	x	x	x	x	x	x	x	x		x						x	x								x	x								
Ductus bursae length:short	x	x	x	x	x	x	x	x	x										x	x	x			x	x	x								
Ductus bursae length:long			x	x		x	x	x		x	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x	x						
Ductus bursae structure:straight	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x	x	x						
Ductus bursae structure:twisted																						x	x	x										
Ductus bursae structure:spiraled																																		
Cestum in ductus bursae:absent	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
Cestum in ductus bursae:present																																		
Signa:absent			x				x									x	x		x	x	x	x	x	x										
Signa:1 - bandlike																		x																
Signa:1 - bladelike										x																								
Signa:1 - daggar-shaped											x	x	x	x	x																			
Signa:1 - scobinate patch																											x	x						
Signa:1 - small bump																																		
Signa:1 - thornlike																			x		x		x											
Signa:1 - variable ridge																		x			x													
Signa:2 - bladelike																x																		
Signa:2 - thornlike	x	x		x	x	x	x	x																	x	x								
Signa:2 - thumblike																																		
Signa:variably sclerotized									x																									
Papillae anales:normal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x						
Papillae anales:modified																											x							