	Noctuidae	Copitarsia spp.	Helicoverpa armigera	Helicoverpa zea *Non-Rep*	Helicoverpa spp.	Chloridea virescens *Non-Rep*	Mamestra brassicae	Spodoptera exigua *Non-Rep*	Spodoptera frugiperda *Non-Rep*	Spodoptera littoralis	Spodoptera litura	Spodoptera spp.	Trichoplusia ni *Non-Rep*	Crambidae	Diaphania hyalinata-indica complex	Diaphania nitidalis *Non-Rep*	Diatraea considerata	Diatraea lineolata	Hendecasis duplifascialis	Leucinodes orbonalis	Maruca vitrata	Neoleucinodes elegantalis	Pyrausta spp.	Pyralidae	Cadra cautella *Non-Rep*	Apomyelois ceratoniae *Non-Rep*	Plodia interpunctella *Non-Rep*	Tortricidae	Amorbia spp.	Crocidosema aporema	Cydia pomonella *Non-Rep*	Cydia splendana	Cydia spp.	Grapholita spp.	Thaumatotibia leucotreta	Gelechiidae	Anarsia spp.	Pectinophora gossypiella	Plutellidae	Plutella xylostella *Non-Rep*	Lycaenidae	Strymon spp.	NOT IN KEY	Other Noctuoidea	Other Crambidae	Other Pyralidae	Other Tortricidae	Other Gelechioidea	Other Superfamilies
Larval origin																																																	
Africa			x		x		x	x		x		x	x		x					?	x		x		x	x	x				x		x	x	x		x	x		x				x	x	x	x	x	x
Asia			x		x		x	x			x	x	x		x				x	x	x		x		x	x	x				x		x	x			x	x		x				x	x	x	x	x	x
Australia			x		x			x			x	x											x		x		x				x		x	x				x		x				x	x	x	x	x	x
Canada				x	x	x		x	x			x	x		x	x							x		x	?	x		x		x		x	x			x			x				x	x	x	x	x	x
Caribbean		x		x	x	x		x	x			x			x	x		x			x	x	x		x	x	x		x	x	x		x	x				x		x				x	x	x	x	x	x
Central America		x		x	x	x		x	x			x	x		x	x		x			x	x	x		x	x	x		x	x	x		x	x				x		x		x		x	x	x	x	x	x
Europe			x		x		x	x		x		x	x							?	x		x		x	x	x				x	x	x	x	x		x	x		x				x	x	x	x	x	x
Hawaii				x	x			x			x	x	x			x					x		x		x	x	x		x		x		x	x						x				x	x	x	x	x	x
Mexico		x		x	x	x		x	x			x	x		x	x	x	x			x	x	x		x	x	x		x	x	x		x	x			x	x		x		x		x	x	x	x	x	x
Middle East			x		x		x	x		x	x	x	x							x	x		x		x	x	x				x	x	x	x	x		x	x		x		x		x	x	x	x	x	x
New Zealand			x		x			x			x	x											x		x		x				x		x	x						x				x	x	x	x	x	x
South America		x	x	x	x	x		x	x			x	x		x	x		x			x	x	x		x	x	x			x	x		x	x				x		x				x	x	x	x	x	x
Unknown		x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x		x	x	x	x	x	x	x		x	x		x		x		x	x	x	x	x	x
Macro vs. Microlepidoptera																																																	
Prespiracular group on T1:bisetose (or unisetose) - Macrolepidoptera		x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x																	x	x	x			x
Prespiracular group on T1:trisetose - Microlepidoptera																													x	x	x	x	x	x	x		x	x		x								x	x	x
Prespiracular group on T1:primary setae not evident - Butterflies, etc.																																										x							x
Macrolepidoptera																																																	
L1 and L2 setae on A2-7:L1 and L2 close together or on same pinaculum															x	x	x	x	x	x	x	x	x		x	x	x																		x	x			x
L1 and L2 setae on A2-7:L1 and L2 widely separated		x	x	x	x	x	x	x	x	x	x	x	x																														x					x
Crochet arrangement:circle or ellipse															x	x	x	x	x	x	x	x	x		x	x	x																		x	x			x
Crochet arrangement:mesoseries		x	x	x	x	x	x	x	x	x	x	x	x																														x					x
Noctuoidea																																																	
Segments with prolegs:prolegs on A3-6 and A10		x	x	x	x	x	x	x	x	x	x	x																															x						
Segments with prolegs:prolegs on A5-6 and A10 (or vestigial on A3 and A4)													x																														x						
Segments with prolegs:prolegs on A6 and A10 (or vestigial on A5)																																																	x
Integument texture:with short, sharp spines			x	x	x	x																																					x						
Integument texture:smooth		x					x	x		x	x	x	x																														x						
Integument texture:granulose									x																																		x						
Dorsal pinacula on A1, A2, and A8:no microspines		x	x	x	x		x	x	x	x	x	x	x																														x						
Dorsal pinacula on A1, A2, and A8:covered with microspines						x																																					x						
Prespiracular group on T1 setal arrangement:vertical		x					x	x	x	x	x	x	x																														x						
Prespiracular group on T1 setal arrangement:horizontal			x	x	x	x																																					x						
Mandible:Large retinaculum:absent		x	x	x	x			x	x	x	x	x	x																														x						
Mandible:Large retinaculum:present						x	x																																				x						
Mandible:Scissorial teeth:with scissorial teeth resulting in a serrate cutting edge		x	x	x	x	x	x	x	x	x	x	x	x																														x						
Mandible:Scissorial teeth:lacks scissorial teeth resulting in a smooth cutting edge												x																															x						
T2-3, dark bar connecting to a tonofibrillary platelet:absent			x	x	x	x							x																														x						
T2-3, dark bar connecting to a tonofibrillary platelet:on SD1 (not SD2)								x	x	x	x	x																															x						
T2-3, dark bar connecting to a tonofibrillary platelet:on SD1 and SD2		x					x																																				x						
Host:orchids (Dendrobium, Oncidium, etc.)											x																																						
Host:other (not specifically listed here)		x	x	x	x	x	x	x	x	x	x	x	x																														x						
Pyraloidea and Carposinidae																																																	
Number of SV setae on A3-6:3 (Pyraloidea)															x	x	x	x	x	x	x	x	x		x	x	x																		x	x			
Number of SV setae on A3-6:4 (Carposinidae)																																																	x
Crambidae and Pyralidae																																																	
Sclerotized ring around SD1 seta on A8:absent (Crambidae)															x	x	x	x	x	x	x	x	x																						x				
Sclerotized ring around SD1 seta on A8:present (Pyralidae)																									x	x	x																			x			
L-group on A9:unisetose (Crambidae)															x	x	x	x	x	x	x	x	x																						x				
L-group on A9:bi- or trisetose (Pyralidae)																									x	x	x																			x			
Abdominal pinacula:pigmented, conspicuous																x	x	x		x	x		x		x	x																			x	x			
Abdominal pinacula:concolorous with body, inconspicuous															x	x	x	x	x			x					x																			x	x			
Crochet length:uniordinal																																														x	x			
Crochet length:biordinal																			x			x	x		x		x																			x	x			
Crochet length:triordinal															x	x	x	x		x	x				?	x	?																			x	x			
Distance btwn SD2 and spiracle on A8:equal to diamater of spiracle (or less)															x	x			x		x	x	?		x		x																			x	x			
Distance btwn SD2 and spiracle on A8:2X diamater of spiracle (or more)																	x	x		x			?			x																			x	x			
Nonsetal bearing plates posterior to D pinacula on T2-3:absent															x	x			x	x		x	x		x	x	x																			x	x			
Nonsetal bearing plates posterior to D pinacula on T2-3:present																	x	x			x																									x	x			
MD and MSD1-2 setae on pigmented pinacula on T2-3:absent															x	x	x	x	x		x	x			x	x	x																			x	x			
MD and MSD1-2 setae on pigmented pinacula on T2-3:present																	x	x		x	x		x																							x	x			
Pigmented spot at genal angle on head:absent															x		x	x	x			x	x		x	x	x																			x	x			
Pigmented spot at genal angle on head:present																x			?	x	x		x			?																				x	x			
Mandible:outer tooth absent																x	x	x	x	x		x	x		x	x	x																			x	x			
Mandible:outer tooth present															x				?		x																									x	x			
Host:Cucurbitaceae															x																															x	x			
Host:Mormordica															x																															x	x			
Host:Saccharum officinarum																	x																													x	x			
Host:Zea mays																		x																												x	x			
Host:Jasminum																			x																											x	x			
Host:Solanum																				x		x																									x	x			
Host:stored products																									x		x																				x	x			
Host:other (not specifically listed here)															x	x	x	x	x	x	x	x	x		x	x	x																			x	x			
Microlepidoptera																																																	
D2 setae on A9:D2 setae on separate pinacula or closer to corresponding D1s																																					x	x		x								x	x
D2 setae on A9:D2 setae paired on single pinaculum or closer to each other than to D1s																													x	x	x	x	x	x	x												x		
Tortricidae																																																	
Anal comb:absent																															x	x	x														x		
Anal comb:present																													x	x				x	x											x		
Abdominal crochets:Length:uniordinal																															x	x	x	x												x		
Abdominal crochets:Length:biordinal																														x	x		x	x												x		
Abdominal crochets:Length:triordinal																													x				x		x											x		
Abdominal crochets:Number:less than 25																																x	x													x		
Abdominal crochets:Number:more than 25																													x	x	x		x	x	x											x		
Prespiracular group on T1:does not extend beneath the spiracle																													x	x	x	x	x	x												x		
Prespiracular group on T1:extends beneath and beyond the spiracle																																	x		x											x		
D1 and SD1 setae on A9:D1 and SD1 on same pinaculum																														x	x	x	x	x	x											x		
D1 and SD1 setae on A9:D1 and SD1 on separate pinacula																													x																	x		
D1, D2, and SD1 setae on A9:D1, D2, and SD1 not on same enlarged pinaculum																													x	x	x	x	x	x	x											x		
D1, D2, and SD1 setae on A9:D1, D2, and SD1 on enlarged (ill-defined) pinaculum																																														x		
L pinaculum on A9:unisetose																																	x													x		
L pinaculum on A9:bisetose (setae on same pinaculum or close)																																	x													x		
L pinaculum on A9:trisetose (all setae on same pinaculum)																													x	x	x	x	x	x	x											x		
L pinaculum on A9:trisetose (2 setae on one, 1 seta on another pinaculum)																															x	x	x	x	x											x		
L pinaculum on A9:trisetose (all setae on different pinacula)																																	x	x	x											x		
Prothoracic shield and head with distinct dark lateral band:absent																														x	x	x	x	x	x											x		
Prothoracic shield and head with distinct dark lateral band:present																													x																	x		
Host:Phaseolus																														x																x		
Host:Castanea																																x	x													x		
Host:Malus, Prunus, or Cydonia																															x		x	x												x		
Host:other (not specifically listed here)																													x	x	x	x	x	x	x											x		
Other Microlepidoptera																																																	
L1 and L2 setae on A2-7:L1 and L2 close together or on same pinaculum																																					x	x										x	x
L1 and L2 setae on A2-7:L1 and L2 widely separated																																								x									x
Prespiracular group on T1:does not extend beneath the spiracle																																						x		x								x	x
Prespiracular group on T1:extends beneath and beyond the spiracle																																																x	x
Prespiracular group on T1:surrounds the spiracle																																					x											x	x
Anal comb:absent																																						x		x								x	x
Anal comb:present																																					x											x	x
Anal prolegs:Size:wider than long (or approx. the same)																																					x	x											x
Anal prolegs:Size:2X longer than wide																																								x									x
Anal prolegs:Crochets:not divided																																						x		x								x	x
Anal prolegs:Crochets:divided into two groups																																					x											x	x
Anal shield:secondary setae absent																																						x		x								x	x
Anal shield:secondary setae present																																					x											x	x