

A review of the type material of Coccinellidae (Coleoptera) described by F.W. Hope, and by E. Mulsant in the Hope Entomological Collections, Oxford

R. G. BOOTH and R. D. POPE

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The type material of Coccinellidae described by F.W. Hope and by E. Mulsant from the collections of F.W. Hope and J.O. Westwood is reviewed. Lectotypes for Hope's species are designated (with a single exception) from material in the British Museum (Natural History). The majority of lectotypes for Mulsant's species described from Hope's and Westwood's material is located in the Hope Entomological Collections, University Museum, Oxford. The identity of a species is discussed where confusion concerning a name has occurred in the past, or where the current interpretation differs from the original description or type material. *Brachiacantha bipartita* Mulsant is resurrected from synonymy with *B. westwoodii* Mulsant. The following new synonymies are recorded (valid name first): *Ballida brahamae* Mulsant = *Palaeoneis aurantiaca* Crotch = *Eoneda sumatrensis* lablokoff-Khznorian; *Calvia quattuordecimguttata* (Linnaeus) = *Oenopia dorsonotata* Mulsant; *Calvia vulnerata* (Hope) = *C. uniramosa* (Hope) = *C. flaccida* Mulsant = *C. vishnu* (Crotch) = *C. krishna* (Crotch) = *C. buddha* (Crotch); *Coelophora saucia* (Mulsant) = *Lemnia melanota* Mulsant; *Rodolia sexnotata* (Mulsant) = *R. guerinii* (Crotch); *Scymnus nubilus* Mulsant = *S. curtisii* Mulsant = *S. lateralis* Sicard. The following are new combinations: *Afidentula stephensi* (Mulsant) (from *Epilachna*); *Horniolus guimeti* (Mulsant) (from *Scymnus*); *Rhyzobius waterhousei* (Mulsant) (from *Scymnus*); *Rodolia sexnotata* (Mulsant) (from *Epilachna*).

R. G. Booth, CAB International Institute of Entomology, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, UK.

R. D. Pope, Department of Entomology, British Museum (Natural History), Cromwell Road, London SW7 5BD, UK.

INTRODUCTION

The Hope Entomological Collections originate from the Deed of Gift executed by F.W. Hope in 1849, presenting his entomological and other collections to the University of Oxford. J.O. Westwood's collections were subsequently purchased by Hope and presented to the University in 1857, and the collections have been added to continually ever since. A very full and illuminating account of the history of the Collections is ably presented in a recent book by Audrey Smith (1986). Both Hope and Westwood received specimens from collectors throughout the world, and exchanged specimens with contemporary authors such as Chevrolat, Gehler, Germar, Guérin-Méneville and Mannerheim, to name but a few.

For the Coccinellidae in particular, the historic importance of the collections is due to E. Mulsant who described many new species from both Hope's and Westwood's collections in his world monograph 'Species des coléoptères trimères sécuripalpes' (Mulsant 1850). Hope himself described 17 species of Coccinellidae (excluding 2 species of Chrysomelidae described under *Coccinella*) from the collections of Major-General T. Hardwicke (Hope 1831) and 3 species from China (collected by Dr T.E. Cantor) in the collections of the East India Company Museum (Hope 1843). Hardwicke's collection was bequeathed to the British Museum, arriving there on 9th April 1835. Crotch (1874) and most subsequent authors have accepted the specimens now in the British Museum (Natural History)



Fig.1. Examples of labels from Hope's and Westwood's specimens. Top row, Hope's handwriting on the lectotype of *Neda princeps*; middle row, Mulsant's numbered yellow labels and Westwood's blue kite-shaped label; bottom row, the determination label from the lectotype of *Scymnus oblongosignatus*, showing Mulsant's handwriting overwritten by Westwood's.

(BMNH) as being the 'types'. Hope, however, undoubtedly retained some syntypes for his own collection. Syntypic material from the Indian Museum came to the British Museum in 1879. As far as we know, Westwood did not describe any new species of Coccinellidae.

Since 1850, very few new species of Coccinellidae have been described from Oxford Museum specimens, but some type material has been acquired with other collections. A single post-Mulsant 19th century species name, *Brachiacantha fenestrata* Gorham, is dealt with in the following list. One source of syntype material which we have not studied is the portion of the TV. Wollaston collection now in Oxford. The primary selection of Wollaston's material (including holotypes and potential lectotypes) is in the BMNH, but there are large amounts of material in both Oxford and Cambridge, containing many duplicate syntypes (M.E. Bacchus *pers. comm.*; Smith 1986).

This study was initiated following a visit by the first author to the Hope Entomological Collections, Oxford University Museum, when it was discovered that there were syntypes and holotypes remaining unrecognised in the general coccinellid collection. In 1938/39, the readily recognisable 'types' of the majority of species were moved to a special type collection for better security and safety. These were later catalogued on a card index and therefore available for study. Those remaining in the general collection were often not readily recognisable and were effectively lost to outside workers.

Recognition of Mulsant determined material

Many Coccinellidae from Hope's and Westwood's collections bear small yellow rectangular labels with a printed number. Similar yellow labels can also be found on some Paris Museum and University of Cambridge Crotch Collection (UCCC)

material. During the course of our work it became obvious that these numbers were attached to one specimen in a series determined to species by Mulsant.

All specimens from Westwood's collection are immediately recognisable by having a blue kite-shaped label, usually bearing only a handwritten 'W' (Fig. 1), but sometimes, particularly in material he acquired later, the kite-shaped label is larger and in addition to the 'W', bears collector and locality data. On Westwood's specimens which bear the yellow numbered rectangles, there are also determination labels with both Mulsant's and Westwood's handwriting (Fig. 1). These are on thin paper in the form of elongate strips, folded up on the pin. The writing on these thin strips is of the following general form; a number, corresponding to that on the yellow rectangle, is followed by either a generic name or a dash, followed by a specific name, all in Mulsant's handwriting. Superimposed on this in Westwood's handwriting is a generic name over the top of any Mulsant dash, and the original author's name and a page reference to the species description in Mulsant (1850). On specimens with numbers above 48, the labels are cut rather short, and may have part of the name written by Mulsant missing, although it has been added by Westwood. The reason for these short labels is explained below.

Species from Hope's collection bear, in addition to any locality data, the yellow numbered rectangles, but no Mulsant determination label. Name labels have all been added subsequently by Museum staff, the most recent being Mr Ernest Taylor in June 1947. Where did they obtain the correct names to attach to these specimens? In the library archives amongst Hope's papers there is a numbered list of species names in Mulsant's handwriting; these numbers correspond to those on the yellow rectangular labels. The list takes the following form. The page is divided longitudinally in half and in each half there are 24 numbers on the first page and 25 numbers on the reverse (i.e. 1-24 left half, 25-48 right half, 49-73 left half over the page etc.). There are 25 names on the left half of the first page because there is also a '4 bis'. On each half page, there is a number, followed by either a generic name or a dash, followed by a specific name (a dash was used in the place of ditto marks for a list of species in the same genus).

The discovery of this list also explained Westwood's system of labelling. He had cut up Mulsant's numbered list of species names, annotated

them and placed each one onto the specimen bearing the appropriately numbered yellow rectangle. It also explained why some of Westwood's labels above the number 48 had the second part of the name cut off, because Mulsant had written on both sides of the paper. As an example, the label on Westwood's specimen of *Rodatus carnifex* was very short and read '60 Rhizobius' in Mulsant's hand, overwritten by 'carnifex Mulsant p1003' in Westwood's hand. On the reverse of the label for species number 36 could be read 'arnifex' in Mulsant's hand, crossed out by Westwood (36 and 60 are back to back on Hope's list).

Table 1 gives a verbatim list of names on Hope's list. Table 2 shows a reconstructed list of Mulsant's names for Westwood's specimens. We know that Westwood's list ended at number 64 from the information on the reverse of the labels from the front of the page of Mulsant's list of determinations; the reverse for label number 40 read 'rneti' (i.e. the end of number 64, *Bucolus founeti*), while the reverse of numbers 41 and 42 contained only text following the end of the list. Only one Westwood specimen has come to light bearing an intermediate number, '46*'. In some cases, the names on the two lists are not the ones used in the final publication. These discrepancies may be due either to slight differences in spelling and typographical errors, or result from Mulsant apparently changing his mind about a species name. Thus there are three unused manuscript names on Hope's list affecting type material from Hope's collection, and a name on one of Westwood's specimens which was used for a different species described from Hope's collection. These names are cross-referenced to their corresponding published names in the footnotes of Tables 1 and 2, and each is discussed under their respective species headings.

Although the small numbered yellow rectangles seem to be a hallmark of Mulsant's work, not all coccinellid collections determined by Mulsant bear them. It seems fairly clear that many collectors preferred their own handwriting, removing Mulsant's numbers and attaching their own labels (as for example, Buquet's collection in the BMNH). However, Mulsant did not just work on Coccinellidae, and other families of beetles determined by Mulsant may bear coloured rectangles with printed numbers. For example, in the Paris Museum, there are many specimens of Mulsant determined Hydrophilidae with numbered salmon pink rectangles (van Berge Henegouwen *pers. comm.*).

Table 1. Manuscript list (quoted verbatim) of Coccinellidae in Hope's collection identified by Mulsant.

Catalogue des insectes de M. Hope

1	<i>Adonia mutabilis</i>	45	<i>Lemnia occulta</i>	90	- territa
2	<i>Adalia flavomaculata</i>	46	- saucia	91	- [names crossed out]
3	<i>Harmonia arcuata</i>	47	- melanota	92	- oculea
4	- <i>impustulata</i>	48	- desolata	93	- vs (retexta)
4 ^{bis}	<i>Coccinella 14-pustulata</i>	49	<i>Coelophora 9-maculata</i>	94	- chrysolmelina
5	- <i>transversalis</i>	50	- <i>bissellata</i>	95	- dodecostigma
6	- <i>divaricata</i>	51	- <i>inaequalis</i>	96	- macularis
7	- <i>7-punctata</i>	52	<i>Oenopia luteopustulata</i>	97	- flavicollis
8	- <i>leonina</i>	53	- <i>dorsonotata</i>	98	- 11 spilota
9	<i>Anatis 15-punctata</i>	54	- <i>4 signata</i> ¹	99	<i>Epilachna 6-notata</i>
10	<i>Cleis humilis</i>	55	- <i>cinctella</i>	100	- varivestis
11	<i>Sospita tigrina</i>	56	<i>Cydonia lunata</i>	101	- borealis
12	<i>Cleobora mellyi</i>	57	<i>Cheilomenes 6-maculata</i>	102	- 28-punctata
13	<i>Halyzia straminea</i>	58	<i>Chilocorus tristis (v.rubidus)</i>	103	- implicata
14	<i>Psyllobora cincta</i>	59	- <i>schioedtii</i>	104	- mystica
15	- <i>bistigmosa</i>	60	- <i>politus</i>	105	- smithi
16	- <i>dissimilis</i>	61	- <i>ruficeps</i>	106	- undulata
17	- <i>punctella</i>	62	- <i>cacti</i>	107	- stephensi
18	- <i>decipiens</i>	63	- <i>nigritus</i>	108	<i>Rodolia rubiginosa</i> ²
19	- <i>20-maculata</i>	64	<i>Orcus janthinus</i>	109	<i>Vedalia cardinalis</i>
20	- <i>roei</i>	65	- <i>cianocephalus</i>	110	<i>Chnoodes fallax</i>
21	- <i>divisa</i>	66	- <i>australasiae</i>	111	- <i>choidoirii</i>
22	<i>Caria dilatata</i>	67	- <i>coerulea</i>	112	<i>Exoplectra miniata</i>
23	- <i>6-spilota</i>	68	<i>Exochomus auritus</i>	113	<i>Azya orbigera</i>
24	- <i>12-spilota</i>	69	<i>Brumus suturalis</i>	114	<i>Aspidimerus spencii</i>
25	<i>Caria commingii</i>	70	<i>Brachyacantha sellata</i>	115	<i>Bucolus fourneti</i>
26	<i>Leis basalis</i>	71	- <i>ursina</i>	116	<i>Scymnus nubilus</i>
27	- <i>javana</i>	72	<i>Cleothera poortmanni</i>	117	- <i>curtisii</i>
28	- <i>15-maculata</i>	73	- <i>levrati</i>	118	<i>Rhizobius ventralis</i>
29	- <i>15 spilota</i>	74	<i>Chnootriba assimilis</i>	119	- <i>evansii</i>
30	- <i>22 signata</i>	75	<i>Epilachna radiata</i>	120	<i>Bulaea bocandei</i>
31	- <i>conformis</i>	76	- <i>consularis</i>	121	<i>Chilocorus politus</i>
32	<i>Neda princeps</i>	77	- <i>proteus var</i>	122	<i>Exochomus russulus</i> ³
33	- <i>marginicollis</i>	78	- <i>nigrocincta</i>	123	<i>Epilachna gradaria var socors</i>
34	- <i>fasciolata</i>	79	- <i>bonplandi</i>	124	- <i>28 maculata v. sparsa</i>
35	- <i>calispilota</i>	80	- <i>marginicollis</i>	125	<i>Exopl.erythrogaster</i>
36	<i>Daulis 16-notata</i>	81	- <i>delesserti</i>	126	<i>Ballida brahamae</i>
37	- <i>henonii</i>	82	- <i>parryi</i>	127	<i>Scymnus guimeti</i>
38	- <i>maeander</i>	83	- <i>hirta</i>		
39	- <i>pulchella</i>	84	- <i>taeniata</i>		---
40	<i>Alesia inclusa</i>	85	- <i>endecasticta</i>		
41	- <i>hamata</i>	86	- <i>grayi</i>		Les espèces qui suivent ne
42	<i>Verania comma</i>	87	- <i>11-variolata var</i>		sont pas des coccinellides
43	- <i>frenata</i>	88	- <i>diffinis (stigmula)</i>		
44	- <i>discolor</i>	89	- <i>pusillanima</i>		

¹see O. kirbyi ²see R. rubea ³see E. childreni

Table 2. A reconstructed list of Westwood's Coccinellidae determined by Mulsant.

1	<i>Hippodamia glacialis</i>	23	<i>Orcus australasiae</i>	45	<i>Novius sanguinolentus</i>
2	- <i>convergens</i>	24	- <i>coeruleus</i>	46	<i>Scymnus terminatus</i>
3	<i>Megilla maculata</i>	25	<i>Brachyacantha westwoodii</i>	46*	- <i>xanthaspis</i>
4	<i>Naemia vittigera</i>	26	- <i>lepida</i>	47	- <i>oblongosignatus</i>
5	<i>Adalia bipunctata</i>	27	- <i>dentipes</i>	48	[specimen lost]
6	<i>Harmonia impustulata</i>	28	- <i>bistripustulata</i>	49	[<i>Scymnus cons</i>]trictus
7	<i>Coccinella emarginata</i>	29	<i>Epilachna mexicana</i>	50	- <i>fasciatus</i>
8	- <i>7-punctata</i>	30	- <i>alternans</i>	51	- <i>loewii</i>
9	- <i>9-notata</i>	31	- <i>endecasticta</i>	52	- <i>guimeti</i> ¹
10	- <i>repanda</i>	32	- <i>infausta</i>	53	- <i>apetzii</i> var <i>incertus</i>
11	- <i>fulvipennis</i>	33	- <i>dodecostigma</i>	54	- <i>watherousii</i>
12	<i>Anatis 15-punctata</i>	34	- <i>reticulata</i>	55	- <i>minimus</i>
13	<i>Psyllobora 20-maculata</i>	35	- <i>chrysomelina</i>	56	<i>Rhizobius litura</i>
14	<i>Leis basalis</i>	36	- <i>murina</i>	57	<i>Coccidula scutellata</i>
15	- <i>conformis</i>	37	- <i>varivestis</i>	58	<i>Chilocorus bipustulatus</i>
16	<i>Pelina hydropica</i>	38	- <i>borealis</i>	59	<i>Hyperaspis floridana</i>
17	<i>Daulis 16-notata</i>	39	- <i>implicata</i> var <i>lacertosa</i>	60	<i>Rhizobius carnifex</i>
18	- <i>abdominalis</i>	40	- <i>spretta</i>	61	- <i>ventralis</i>
19	- <i>sanguinea</i>	41	- <i>clandestina</i>	62	<i>Verania frenata</i>
20	<i>Alesia hamata</i>	42	<i>Ortalia calliops</i>	63	<i>Micraspis phalerata</i>
21	<i>Cydonia lunata</i>	43	<i>Vedalia sieboldii</i>	64	<i>Bucolus fourneti</i>
22	<i>Chilocorus cacti</i>	44	<i>Exoplectra stevensi</i>		

¹see *Scymnus brullei*

ANNOTATED CATALOGUE

The following list is arranged alphabetically by species or variety name. The species heading comprises the original combination, author, date, pagination and type locality. Localities are enclosed within single quotes when they are listed verbatim (as for most of Mulsant's names). The current combination or valid species name follows the heading. For well-known species, especially those which have been treated recently in faunal works by Iablokoff-Khnzorian (1982), Gordon (1985) and Pope (1989), the comments are restricted to the data on the original specimens. In other cases, where the species is poorly known, or the original specimens disagree with the current interpretation, more detailed notes or a description are supplied.

It has been our practice to regard single 'type' specimens as apparently unique syntypes which are subsequently selected as lectotypes. We have restricted the use of the term holotype for specimens of which the original description clearly stated that only a single individual was involved.

Most specimens bear various curation labels, and to save lengthy repetition, full details of these are not quoted. Many of Hope's specimens from the special type collection bear the species name in an unknown hand, pre 1947, followed by a part handwritten and part printed label placed on the specimens by Mr Ernest Taylor. These labels have the specific names neatly handwritten by Taylor, followed by 'Mulsant 1850 Ann. Soc. Agric. Lyon (2)2:' printed, and finally the page number is added by hand. Specimens from the special type collection have a large, rectangular, numbered label, referred to below as a 'TYPE Col:' label, with 'TYPE Hope Dept. Oxford' printed and 'Col: [number] [species name and author]' handwritten. For specimens now in the BMNH, either an accession number or an early British Museum catalogue label number is quoted. The accession number comprises the year followed by the acquisition in that year (numbered consecutively); for example, the accession number [18]57.71 included Buquet's collection of Coccinellidae. Prior to 1837, some species were numbered

consecutively in a British Museum catalogue. Hardwicke's named material bears labels (referred to below as early BM catalogue labels) with the specific and author's names followed by the catalogue number. Our own designation and determination labels have been added as appropriate. Except where otherwise stated (BMNH or UCCC), all specimens are in the Hope Entomological Collections.

In the Entomology Library of the BMNH, there are three bound volumes of correspondence and species lists entitled Samouelle Register 1, 2 and 3. These volumes contained some useful information concerning Hardwicke's material, especially the numbers of specimens of each species received.

For some species described in 1850, Mulsant clearly saw specimens from many collections, but would list a few collection names followed by 'etc'. Some of these etc's included Hope/Westwood material. There are also specimens in Hope's and Westwood's collections which were given new species names by Mulsant before his work was published, although neither of their collection names were listed in the original descriptions. None of these specimens can be regarded as syntypes, and so are not included in the annotated list. However, the species involved can be deduced from Tables 1 and 2, and these specimens are available for selection as neotypes if necessary.

It is quite possible that among the named material given to Hope and, to a lesser extent, Westwood by contemporary workers, there were original duplicate specimens which we would nowadays regard as valid syntypes. However, our unfamiliarity with original material studied by these authors leaves such specimens unrecognised, although Tables 1 and 2 at least provide some possibilities.

Epilachna alternans Mulsant, 1850: 767 'Java (collect. Chevrolat, Dejean, Germar et Schaum, Leconte, Melly, Westwood)'

Epilachna alternans Mulsant

SYNTYPE female, '30./ Java Burud./ 30 - alternans [Mulsant's hand]/ W/ TYPE Col: 1960'.

Westwood's specimen fits Mulsant's 'var C', i.e. with spots 5, 3 and 4 joined, as well as 1 and 2. The 6th abdominal sternite is deeply notched. This differs from Dieke's (1947: 121) interpretation of *E. alternans*, but fits his interpretation of *E. grayi*. Bie-

lawski (1961: 387) examined a male syntype from Germar et Schaum in the Deutschen Entomologischen Institut in Eberswalde, and figured its genitalia, noting their close similarity to the figures which Kapur (1958) illustrated for *E. grayi* Mulsant. He didn't comment on the females. The female paralectotype of *E. grayi* (see below) has the 6th sternite entire, not notched as in Westwood's syntype of *E. alternans*.

Gordon (1987: 9) did not select a lectotype from the Crotch collection, and we have refrained from doing so, preferring to wait, as did Bielawski (1961), until a detailed revision is undertaken with a more adequate series of specimens.

Coccinella bicolor Hope, 1831: 31 Nepal (nec Klug, 1829)

= *Harmonia dimidiata* (Fabricius)

LECTOTYPE male (here designated), 'bicolor Hope/Hardwicke Bequest [printed]/ bicolor Hope 4193 [early BM catalogue label]' (BMNH).

Although Samouelle's Register in the Entomology Library of the BMNH records two specimens of *C. bicolor* as received from Hardwicke, only one now remains.

Mulsant (1850) did not know the species, but Crotch (1874: 32, 119) synonymised Hope's species name with *Harmonia dimidiata* (Fabricius).

Coelophora bissellata Mulsant, 1850: 400 'le Bengale (collect. Dupont, Hope); Java (Reiche)'

Coelophora bissellata Mulsant

LECTOTYPE (here designated), '50./ Bengal/ TYPE Col: 1911'. PARALECTOTYPE 1, 'K. Hills [i.e. Kasia Hills]'.

Gordon (1987: 19) lists 5 specimens from Crotch's collection, but does not select a lectotype. This is a very distinctive species which seems to have been correctly interpreted by subsequent authors. Timberlake (1943: 57) placed it in a new genus *Spilocaria*, but this name was treated as a subgenus of *Lemnia* by Iablokoff-Khnzorian (1979: 62) and as a synonym of it by Iablokoff-Khnzorian (1982: 218). *Lemnia* was in turn treated as a synonym of *Coelophora* by Pope (1989: 662), following Crotch (1874: 148).

Psyllobora bistigmosa Mulsant, 1850: 168
'Penang ou île du prince de Galles (collect.
Hope)'

Illeis bistigmosa (Mulsant)

HOLOTYPE '15./ P.W.I. [i.e. Prince of Wales Island]'

The holotype is pinned onto a card stage, but the head and pronotum are missing. However, there is no doubt that the current interpretation of the species name is correct.

Ballida brahamae Mulsant, 1850: 1042 'la
Chine (collect. Hope)'

Ballida brahamae Mulsant

= *Palaeoeneis aurantiaca* Crotch **syn. n.**

= *Eoneda sumatrensis* Iablokoff-Khnzorian
syn. n.

HOLOTYPE 'Cantor [i.e. Dr T. Cantor]/ 126 [off-white
rectangle in Mulsant's hand]/ HOLOTYPE *Ballida bra-*
hamae Muls. det R.G. Booth 1987/ TYPE Col: 2129'.

Mulsant described this species based on 'un insecte en assez mauvais état'. The specimen does indeed have a considerable amount of old mould growth on it, but is otherwise in reasonable condition. It can only be assumed that Mulsant either mistook some of the mould for pubescence or thought that the pubescence had been lost, otherwise he would not have placed the species with the Epilachninae. This confusion can account for the fact that the species name has never before been recognised. Mulsant's description refers correctly to the simple claws, but 'longueur' should read 'largeur' to make sense of the rest of the description, which otherwise fits the holotype well. The quoted locality of China is incorrect, perhaps Mulsant misread Cantor for Canton. The species is known from Malaysia and Indonesia. Dr Cantor collected material from various localities, including the island of Penang along the Malaysian peninsula (von Hayek 1973). The number on the specimen, in Mulsant's handwriting rather than a printed yellow rectangle, is unusual, but the lectotype of *Scymnus guimeti* (see below) also has a hand-written number.

The systematic position of the genus and its allies (e.g. *Buprestodera* Sicard) is unclear. The prominent canthus in front of the eye, the antennae with the enlarged first segment and the abdomen with only five visible sternites are characters found in the Exoplectrini, which are otherwise all pubescent. Miyatake (1969) redescribed the species (as

Palaeoeneis aurantiaca Crotch) and placed it with its allies near to *Plotina* in the Sticholotidini (as Pharini).

Scymnus brullei Mulsant, 1850: 984 'la Floride (collect. Westwood)'

Scymnus brullei Mulsant

? SYNTYPE female, 'E. Florida Doubleday/ 52./ W/ 52 - Guimeti [Mulsant's hand]/ TYPE Col: 1940'.

No specimens from Westwood's collection bearing the name *Scymnus brullei* could be found, but the above specimen clearly fits the original description and has the appropriate data. The determination label 'guimeti' is incorrect; Mulsant evidently changed his mind about the name for this species, because *Scymnus guimeti* Mulsant (q.v.) is an entirely different, Oriental species described from material in Hope's collection.

The specimen was dissected and found to be a female; the fifth visible abdominal sternite is weakly emarginated. It is possibly an example of *Scymnus securus* Chapin, but not *Scymnus brullei* as interpreted by Gordon (1976: 270). In view of the specimens incorrect determination label and our lack of familiarity with the North American scymnine fauna, we have refrained from selecting it as the lectotype of *Scymnus brullei*.

Vedalia cardinalis Mulsant, 1850: 906 'la Nouvelle Hollande (collect. Hope)'

Rodolia cardinalis (Mulsant)

HOLOTYPE '109./ NH/ TYPE Col: 1941'.

This species is very well known for its use in biological control.

Rhizobius (Rodatus) carnifex Mulsant, 1850: 1003 'l'Australie (collect. Westwood)'

Rodatus carnifex (Mulsant)

LECTOTYPE (here designated), '188 VDL Ewing [i.e. Van Diemen's Land = Tasmania]/ 60./ W/ 60 *Rhizobius* [Mulsant's hand, rest of label cut off short] *carnifex* Mulsant pl003 [Westwood's hand]'. PARALECTOTYPE 1, '107 VDL Ewing/ W'.

Crotch (1874: 296) raised *Rodatus* to generic status.

Chnoodes chaudoiri Mulsant, 1850: 911 'le Brésil (collect. Buquet, Hope; Muséum de St-Petersbourg)'

Chnoodes chadoiri Mulsant

LECTOTYPE (here designated), '57.71 [BMNH accession number]/ Chnoodes Chadoiri Muls. Brésil [green Buquet collection label]/ Named by Mulsant [printed]' (BMNH). PARALECTOTYPE 1, '111./ Rio/ TYPE Col: 1943'.

Exochomus childreni Mulsant, 1850: 1035 'la Floride (collect. Hope, Muséum britannique)'*Exochomus childreni* Mulsant

LECTOTYPE (here designated), 'Ent. Club. 44-12 [printed]/ 843 [hand] E. Doubleday. St. John's Bluff, E. Florida. [printed] Exochomus childreni Muls pl035 [Adam White's hand on reverse of printed label]' (BMNH). PARALECTOTYPES 2 on same card, '122./ NA'.

Mulsant's manuscript list of Hope's material records number 122 as 'russulus', but this was not used in the final publication. However, it is more than likely that these specimens are the ones referred to by Mulsant under the name *E. childreni*, so they are accepted as paralectotypes.

Gordon (1985), in his coverage of the North American Coccinellidae, treated *E. childreni* as a distinct species, and not a variety or subspecies of the more widespread *E. marginipennis* (LeConte), but he didn't select a lectotype.

Coccinella cincta Hope, 1831: 31 Nepal (nec Fabricius, 1798)

= *Coelophora circumvelata* (Mulsant)

LECTOTYPE male (here designated), 'cincta Hope/ cincta Hope 4207 [early BM catalogue label] circumvelata Muls [subsequent addition by Adam White/ Hardwicke Bequest [printed]]'.

Mulsant (1850: 387) pointed out that Hope's species name was preoccupied and he proposed *Lemnia circumvelata* as replacement. His redescription was presumably based on the lectotype, because we have not found any specimens in Hope's collection. Samouelle's Register records only a single specimen as received from Hardwicke. There are no other specimens in BMNH and the species remains poorly known. Iablokoff-Khnzorian (1982: 220) redescribed it based on female specimens. Some colour forms of *Coelophora circumusta* (Mulsant) are similar, but they lack the microsculpture on the dorsal surface. Pope (1989) treated *Lemnia* as a synonym of *Coelophora*, following Crotch (1874: 148).

Oenopia cinctella Mulsant, 1850: 426 'le cap de Bonne-Espérance (Dejean, Hope, Westermann); Timor (Muséum de Paris)'

= *Oenopia cuneata* (Thunberg)

LECTOTYPE (here designated), '55./ CBS [i.e. Cape of Good Hope]/ TYPE Col: 1916'.

This species was redescribed by Iablokoff-Khnzorian (1982: 414). Pope (1987: 55) used *O. cuneata* as the valid name for the species.

Lemnia circumvelata Mulsant, 1850: 388, see *Coccinella cincta* Hope*Orcus (Curinus) coeruleus* Mulsant, 1850: 472 'le Brésil (collect. Dejean (type), Guérin, Muséum de St-Pétersbourg, etc.); le Chili (Muséum de Paris); le Mexique (Chevrolat, Westwood, etc.)'*Curinus coeruleus* (Mulsant)

SYNTYPE female, 'Mex Coffin/ W/ 24 - coeruleus [Mulsant's hand]/ TYPE Col: 1926 2/2'. Other material: 1 male, '67./ Mex/ TYPE Col: 1926 1/2'.

The numbered yellow label is missing from Westwood's specimen. Since Hope was not actually listed in the original description, we have excluded his material from the syntype series, although it is listed above as other material because it had been previously labelled as a type. Gordon (1987: 24) recorded 14 specimens from Crotch's collection, some of which ought to be syntypes. A lectotype should be selected from the Dejean collection.

Caria commingii Mulsant, 1850: 236 'Manille (collect. Hope)'*Docimocaria commingii* (Mulsant)

HOLOTYPE '[small yellow rectangle, without data]/ 25./ Manilla/ Comingii/ TYPE Col: 1922'.

Crotch (1874: 172) transferred the species to a new genus *Docimocaria* (misspelling the specific name as *cumingii*), and pointed out its close similarity to *Harmonia paulinae* (Mulsant) (as *Leis*). Bielawski (1962) again referred to the close superficial similarity of the two species and gave characters to separate them. In addition, *H. paulinae* lacks apical tibial spurs.

Lotis confucii Mulsant, 1850: 1036 'les environs de Canton en Chine (collect. Hope)'

Sticholotis confucii (Mulsant)

This name was not on Hope's list of species determined by Mulsant, and no specimens answering to the original description have been found. If Mulsant did indeed see specimens from Hope's collection, then it is likely that China was not the correct locality. Perhaps he saw specimens labelled 'Cantor', i.e. collected by Dr Cantor, probably from the islands along the Malaysian peninsula. Crotch (1874: 201) transferred the species to a new genus *Sticholotis*, and questioned the original locality data, on the basis of a specimen from Sarawak which he believed to be this species.

Scymnus constrictus Mulsant, 1850: 971 'l'île Maurice? (collect. Westwood)'

Scymnus constrictus Mulsant

? SYNTYPE '117./ TYPE Col: 1934'.

The original Westwood labels and mounts have been lost, but we know that the species was number 49 on Mulsant's original list of Westwood's material because part of the name remains on the reverse of the label for species number 25, *Brachiacantha westwoodii* (q.v.). The data labels quoted above belonged to *Scymnus curtisii* Mulsant from Hope's collection. However, the carded specimen is not *S. curtisii*, but is an example of *S. constrictus*. The specimen has an old pin hole through the right elytron showing that it has been remounted from its original pin. There is some possibility that it could be an original syntype that has been remounted onto the wrong set of data labels.

S. constrictus was recently redescribed and its genitalia figured by Chazeau et al. (1974).

Epilachna consularis Mulsant, 1850: 712 'la Colombie (collect. Buquet, Guérin, Hope, Reiche)'

Epilachna consularis Mulsant

LECTOTYPE female in UCCC (designated by Gordon 1975: 73). PARALECTOTYPES 2 females: 1, 'Bog [i.e. Bogota]/ 76./ Type Col: 1946'; 1, '57.71 [BMNH accession number]/ 142. [pale yellow disc, number in ink]/ Consularis Reiche Colombie [green Buquet collection label]/ Named by Mulsant [printed]' (BMNH).

The species was redescribed by Gordon (1975), and both paralectotypes appear to be correctly identified.

Novius cruentatus Mulsant, 1846: 214 'Berlin'

Novius cruentatus Mulsant

? SYNTYPES, 4 specimens on one rather blackened card, '63 [small white rectangle]/ W/ Novius cruentatus Mulsant Berlin (Dohrn) [Westwood's hand]'.

Mulsant (1846: 215) remarks that this species was described from numerous examples from Berlin, sent to him by Dohrn (misspelt as Dorhn) and Schaum, and so it is quite likely that Westwood's four specimens came from part of the original syntype series.

Although Mulsant (1846: 213) proposed the new name *Nomius*, he corrected this to *Novius* on the fourth page of the 'Addenda et Errata', which was apparently issued at the same time as the original work, but was not paginated.

Scymnus curtisii Mulsant, 1850: 973 'le royaume d'Assam (collect. Hope)'

= *Scymnus nubilus* Mulsant **syn. n.**

Specimen labelled '117./ TYPE Col: 1934'.

The label number 117 undoubtedly refers to *S. curtisii* as shown by Mulsant's list of Hope's species (Table 1), but the specimen above the label clearly does not fit the original description and is an example of *S. constrictus* Mulsant (q.v.). This specimen is carded, but has an old pin hole through the right elytron showing that it has been remounted at some time, and, presumably, placed onto the wrong set of data labels. It must be assumed that the original syntype of *S. curtisii* has been lost, but the original description and locality suggest that a normally-coloured example of *S. nubilus* was involved.

Orcus cyanocephalus Mulsant, 1850: 467 'les environs du port Esington, dans la Nouvelle Hollande (collect. Hope, Guérin)'

Orcus cyanocephalus Mulsant

LECTOTYPE (here designated), '65./ P. Ess. [Hope's hand]/ cyaneus Hope P. Ess [Hope's hand]/ TYPE Col: 1925/ LECTOTYPE *Orcus cyanocephalus* Muls R.D. Pope des 1981'.

After the species diagnosis, Mulsant refers to '*Chilocorus cyaneus*, Hope, in collect.', which is otherwise a manuscript name.

Gordon (1987: 23) lists Guérin's specimen in the Crotch collection as a paralectotype.

Psyllobora decipiens Mulsant, 1850: 177 'le Brésil (coll. Hope, etc.); la Colombie (Dejean, etc.)'

Psyllobora decipiens Mulsant

LECTOTYPE male (here designated), '18./ Bz [very small off-white rectangle]/ TYPE Col: 1914'.

The lectotype had previously been dissected and the abdomen and genitalia glued to a second card.

Lemnia desolata Mulsant, 1850: 387 'la Nouvelle Hollande (collect. Hope)'

Coelophora inaequalis (Fabricius)

HOLOTYPE '48./ P. Ess. [Hope's hand]/ TYPE Col: 1917'.

The synonymy was established by Houston (1979: 49).

Coccinella dimidia Hope, 1831: 30 Nepal

= *Harmonia dimidiata* (Fabricius)

LECTOTYPE male (here designated), 'dimidia Hope/ Hardwicke Bequest [printed]/ dimidia Hope 4192 [early BM catalogue label]' (BMNH). PARALECTOTYPES 2: 1 male, '26./ dimidia mihi [Hope's hand]/ TYPE Col: 1964'; 1 female, 'Hardwicke Bequest [printed] Coc. basalis Redt. Hugel. Kaschm t28 f7 [Adam White's hand on reverse of printed label]' (BMNH).

Two Hardwicke specimens were originally registered at the BM according to Samouelle's Register, and both are extant. The lectotype is rather damaged, lacking head and pronotum, but it bears the original labels.

Mulsant (1850: 243) synonymised *C. dimidia* with *Leis basalis* (Redtenbacher), and Crotch (1874: 119) synonymised both with *Harmonia dimidiata* (Fabricius) (as *Leis*).

Coccinella dodecaspilota Hope, 1831: 31 Nepal

Alloneda dodecaspilota (Hope)

LECTOTYPE female (here designated), 'Hardw Bequ [printed, rest of label cut off]/ 12-spilota Hope 4194 [early

BM catalogue label]' (BMNH). PARALECTOTYPES 3: 1 male, '24./ 12 spilota Nepal [Hope's hand]/ TYPE Col: 1956'; 1 male, '12 spilota mihi [Hope's hand]'; 1 female, '12 spilota Hope/ Hardwicke Bequest [printed]' (BMNH).

According to Samouelle's Register, two Hardwicke specimens were originally registered, and both are extant. The lectotype is in good condition, but the BMNH paralectotype is damaged, having lost its head and pronotum.

Hope (1831) originally published the specific name as *12 spilota*, and although most authors have followed Crotch (1874: 178) and referred to it as *dodecaspilota*, Mulsant (1850: 236) referred to it as *duodecimspilota*. The species was transferred to its current genus by Iablokoff-Khznorian (1979: 44, caption to figure), although he misquoted the specific name on page 63 as *dodecastigma*.

Epilachna dodecastigma Mulsant, 1850: 789 'le Bengale (collect. Hope, Westermann)'

= *Epilachna vigintioctopunctata* (Fabricius)

SYNTYPE male, '95./ Khasyah Hills [i.e. Kasia Hills]/ SYNTYPE *Epilachna dodecastigma* Muls. = *Epilachna vigintioctopunctata* (Fab.) det R.G. Booth 1987'. Other material: 1 female, 'Assam Jenkins/ 33./ W/ 33 - dodecastigma [Mulsant's hand]/ *Epilachna dodecastigma* (Wied.) 1823, A.P. Kapur det 1959 NOT HOLOTYPE [in Kapur's hand, except A.P. Kapur det 19 printed]/ TYPE Col: 1954'.

After his diagnosis, Mulsant referred to '*Coccinella dodecastigma*, Wiedemann, D. Westermann, in litter.', presumably intending that the concept of his species should be the same as that of Wiedemann, although he was unaware of its previous publication. This is confirmed in Mulsant's supplement (1853: 248), where he quotes the reference to Wiedemann's original description in 1823. We have refrained from selecting a lectotype until Westermann's material can be examined.

Kapur (1967: 150) used the name *Epilachna dodecastigma* (Wiedemann), for the species known in this paper as *E. pusillanima* Mulsant, presumably based on the Westwood specimen (see above, other material) which he had dissected in 1959 (the abdomen was dissected and mounted between two coverslips and is pinned below the specimen). However, as noted by Kapur, the Westwood specimen has no syntypic status, and, therefore, ought not to have been used as a basis for interpreting Wiedemann's name.

Oenopia dorsonotata Mulsant, 1850: 424 'le Bengale (collect. Hope)'

= *Calvia quattuordecimguttata* (Linnaeus) **syn. n.**

LECTOTYPE (here designated), 'Bengal [Hope's hand]/ 53./ TYPE Col: 1918'.

The lectotype was closely matched with two previously dissected specimens from Bhutan (in BMNH). In colouration, all three are like a small-spotted form of *C. duodecimmaculata* (Gebler), the latter now correctly regarded (e.g. by Gordon 1985) as a colour form of *C. quattuordecimguttata*.

Crotch (1874: 145) transferred *O. dorsonotata* to *Anisocalvia*, and Iablokoff-Khnzorian (1982: 179) gave a brief diagnosis (as *Calvia*), although the species was unknown to him.

Coccinella duodecimpilota Hope, 1831: 31, see *Coccinella dodecaspilota* Hope

Epilachna enneacticta Mulsant, 1850: 769 'Java (collect. Buquet, Chevrolat, Dejean, Germar et Schaum, Guérin, Hope, Melly, Reiche, Westwood; Muséum de Paris)'

Epilachna enneacticta Mulsant

LECTOTYPE in UCCC (designated by Gordon 1987: 9). PARALECTOTYPES 3: 1 from Hope's collection, 'Java/ 85./ TYPE Col: 1953'; 2 from Westwood's collection, 1, 'Java ... [remainder of label illegible]/ 31./ W/ 31 - endecacticta [Mulsant's hand]', 1, 'W/ Java'.

The sexes in this species can be separated easily because the fifth visible abdominal sternite is truncate in the male but very deeply notched in the female. The species was redescribed and figured by Dieke (1947).

Although Mulsant had clearly intended to call this species *E. endecacticta* (as is obvious from his manuscript lists, correction (Mulsant 1853: 245) and the note under the succeeding species, *E. compilata* (Mulsant 1850: 771)), the original misspelt name has been used ever since and should stand.

Exoplectra (Coeliaria) erythrogaster Mulsant, 1850: 916 'le Brésil (collect. Buquet, Chevrolat, Dejean (*type*), Hope, Reiche)'

Coeliaria erythrogaster (Mulsant)

Although this name appeared on Mulsant's

manuscript list of Hope's material as number 125, no definite syntypes have been located. One *Coeliaria* specimen, labelled only 'Mex', was found which could be Hope's syntype without its yellow numbered rectangle, although Mulsant recorded Brazil alone as the type locality. This specimen was compared with Buquet's syntype (in BMNH), but the two were doubtfully conspecific. Gordon (1987: 34) listed two syntypes in Crotch's collection, Cambridge.

Mulsant described the species as *Exoplectra erythrogaster*, but, in his 'Additions et Rectifications' (p. 1042), he proposed the name *Coeliaria*. However, in his 'Tableau Méthodique' (p. 1098), it is clear that he intended *Coeliaria* to be a subgenus of *Exoplectra*. Crotch (1874: 283) raised *Coeliaria* to full generic status.

Rhizobius evansii Mulsant, 1850: 1006 'Adélaide, Nouvelle Hollande (collect. Hope)'

Rhizobius evansii Mulsant

LECTOTYPE (here designated), '119./ Adelaide/ TYPE Col: 1945'.

The lectotype is a teneral, pale specimen.

Chnoodes (Dapolia) fallax Mulsant, 1850: 910 'le Brésil (collect. Buquet, Dejean, Germar et Schaum, Hope)'

Dapolia fallax (Mulsant)

LECTOTYPE (here designated), '57.71 [BMNH accession number]/ Fallax. Dej. Muls Brésil [green Buquet collection label]/ Named by Mulsant [printed]' (BMNH). PARALECTOTYPE '110./ Mex/ TYPE Col: 1944'.

Hope's specimen is labelled as coming from Mexico, which is almost certainly in error. Some specimens of other species in Hope's collection are labelled 'Mex', also apparently erroneously. There is no reason not to accept Hope's specimen as an original syntype, since its yellow rectangle bears the appropriate number for the name on Mulsant's manuscript list. The lectotype has the left side of the pronotum deformed.

In the original description, Mulsant used the combination *Chnoodes fallax*, but on p. 1043 he indicated that *C. fallax* and four other named species should be placed under the name *Dapolia*. However, in his 'Tableau Méthodique' (p. 1099), it

is clear that he intended *Dapolia* to be a subgenus of *Chnoodes*. Crotch (1874: 287) raised *Dapolia* to full generic status.

Neda fasciolata Mulsant, 1850: 290 'la Colombie'

= *Neda norrisii* (Guérin-Ménéville)

LECTOTYPE in UCCC (designated by Gordon 1987: 21). PARALECTOTYPES 2: 1, '34./ Bog [i.e. Bogota]'; 1, '57.71 [BMNH accession number]/ 70 [small yellow disc]/ Fasciolata Muls. Colombie [green Buquet collection label]/ Named by Mulsant [printed]' (BMNH).

Since Mulsant failed to include details of the collections from which the species was described, the ICZN rules allow for circumstantial evidence to be used in selecting syntypes. As Gordon (1987) has already selected a lectotype, the Hope and BMNH syntypes are treated as paralectotypes.

In the original description, Mulsant hinted that this species was just a variety of *N. norrisii*. He synonymised *N. fasciolata* and some other species names as varieties of *N. norrisii* in his Monographie (Mulsant 1866: 208).

Brachyacantha fenestrata Gorham, 1894: 190

Brachiacantha fenestrata Gorham

LECTOTYPE male (here designated), 'V. de Chiriqui 3-4000ft. Champion. [printed]/ Brachyacantha fenestrata, Gorham [Gorham's hand]/ B.C.A., Col., VII. Brachyacantha [printed] fenestrata G. [Champion's hand]/ LECTOTYPE Brachyacantha fenestrata Gorham Gordon 1970 [part printed, part Gordon's hand]', the left hand specimen with a female on the same card (BMNH). PARALECTOTYPES 21: 19, various localities (BMNH); 2, 'V. de Chiriqui, 25-4000ft. Champion./ BCA duplicates pres. 1909 by F.D. Godman Cat. No. 84'.

Much duplicate identified and unidentified material from the Biologia Centrali-Americana collections was distributed to other museums, including Oxford and Paris (including many of Gorham's syntypes which are now in the Sicard collection).

Hyperaspis floridana Mulsant, 1850: 1040 'la Floride (collect. Westwood)'

Diomus floridanus (Mulsant)

LECTOTYPE (designated by Gordon 1976: 325), 'E. Florida Doubleday/ 59./ W/ 59 Hyperaspis [Mulsant's hand, rest of label cut off short] Hyperaspis [overwritten on Mulsant's hand by Westwood] floridanus Mulsant ap-

pend p. 1040 [Westwood's hand]/ Lectotype *Hyperaspis floridana* Mulsant Gordon 1972/ TYPE Col: 1939'.

This species was redescribed by Gordon (1976).

Bucolusourneti Mulsant, 1850: 1000 'l'Australie (collect. Hope)'

Bucolusourneti Mulsant

LECTOTYPE (here designated), '115./ Adelaide'. Other material 1, '64./ S Austral/ W/ 64 Bucolus fou [Mulsant's hand, label cut off short] -neti Muls p 1000 [added by Westwood]'.

Since Mulsant mentioned only Hope's material in the original description, Westwood's specimen is excluded from the syntype series. Westwood's specimen is in much better condition than the lectotype.

Epilachna grayi Mulsant, 1850: 774 'le Bengale (collect. Hope); les parties septentrionales de l'Inde (Muséum britannique)'

Epilachna grayi Mulsant

LECTOTYPE male (here designated), 'Bengal/ 86./ TYPE Col: 1955'. PARALECTOTYPES 2: 1 female, '[small yellow rectangle, without data]/ Epilachna grayi [Mulsant's hand, unusually small and neat label]' (BMNH); 1, 'innuba Oliv [det. Hope]/ Hardwicke Bequest [printed]/ Grayi Muls. Sec. p774 [Adam White's hand]' (BMNH).

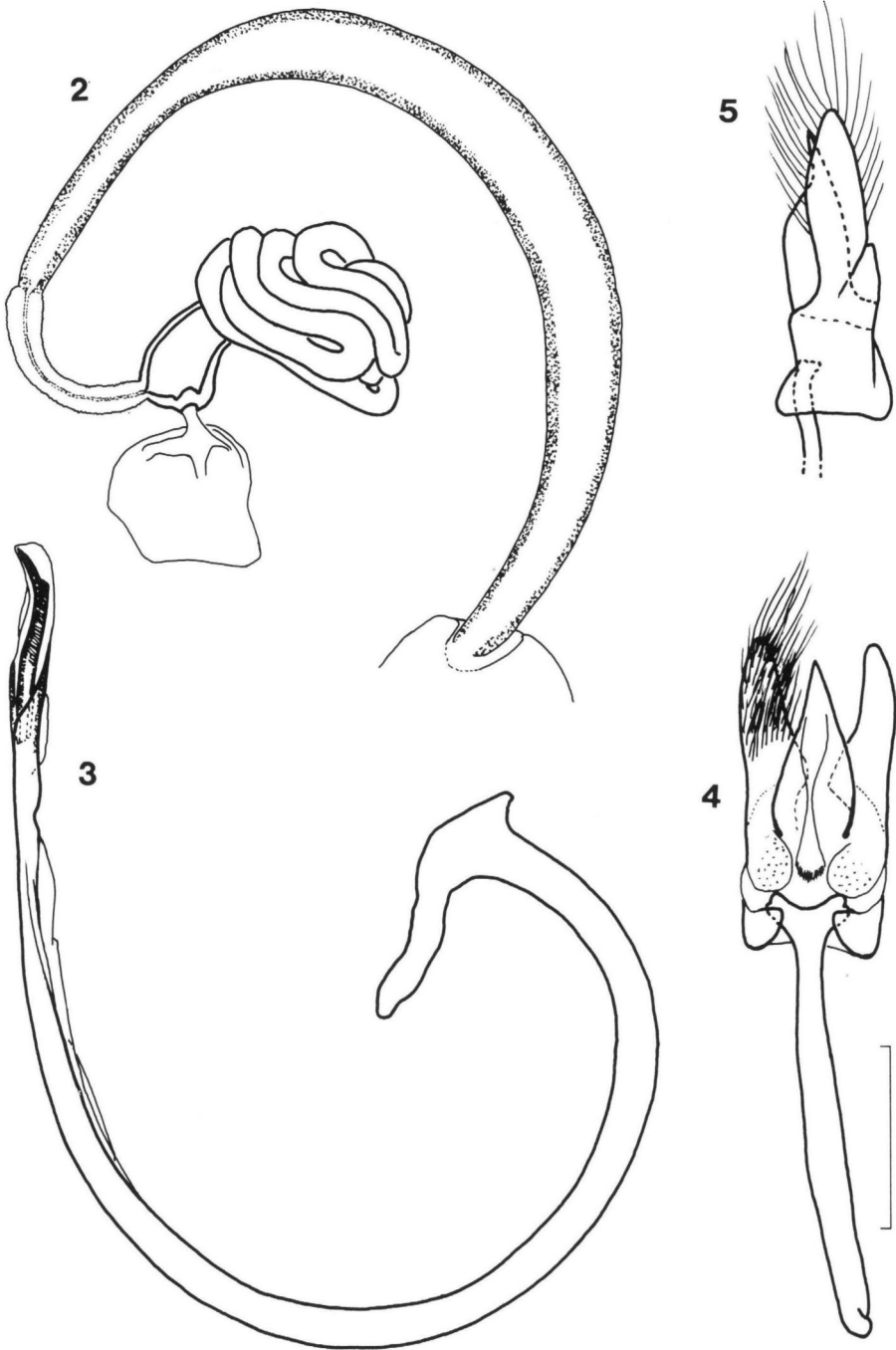
The first female paralectotype (bearing Mulsant's det. label) has the fifth visible sternite entire, showing that Dieke's (1947) interpretation of this species was incorrect (see also *E. alternans* above). The second paralectotype has had the fifth sternite damaged by previous dissection, but is probably also entire. The latter specimen is accepted as a paralectotype because it was in the collections when Mulsant visited the British Museum, and because Adam White had labelled some, but not all, of the specimens determined by Mulsant.

Kapur (1958: 314) illustrated a specimen of *E. grayi* with an extensive black area on the pronotum; in the type series, the pronotum possesses a small black discal spot.

Scymnus guimeti Mulsant, 1850: 979 'les parties orientales de l'Asie? (collect. Hope)'

Horniolus guimeti (Mulsant) **comb. n.**

LECTOTYPE female (here designated), 'Cantor/ 127 [Mulsant's hand, on white rectangle]'.



Figs. 2-5. Male and female genitalia of *Horniolus guimeti* (Mulsant): (2) female genitalia of lectotype; (3) siphus; (4) median lobe, parameres, trabes, ventral view; (5) same, lateral view. (Scale marker = 125 μ m, Fig. 2; 0.25 mm, Figs. 3-5)

This specimen was the only one found among Hope's material which fitted the original description, and the number in Mulsant's handwriting corresponded to that on his manuscript list of Hope's material. The holotype of *Ballida brahmae* also has a hand-written number, rather than the usual number printed on a yellow rectangle.

The female genitalia of the lectotype are shown in Fig. 2. This specimen was matched to BMNH material from Malaysia (Kuala Lumpur, Sarawak and Sabah). The male genitalia (Figs. 3–5) are of one of the specimens from Kuala Lumpur.

This species appears not to have been correctly recognised since its original description. Weise (1879: 145) gave a brief description, but without any evidence that he had identified the species. Gorham (1894: 207) 'temporarily referred to this insect' four examples from India in Andrewes' collection, but these specimens are in fact *S. latemaculatus* Motschulsky (= *S. quadrillum* Motschulsky, 1858 nec Redtenbacher, 1843).

Daulis henonii Mulsant, 1850: 321 '?' (collect. Dupont, Hope)'

= *Harmonia axyridis* (Pallas)

No Hope syntypes of this species have yet been located. Crotch (1874: 123) established the above synonymy (as *Ptychanatis*), indicating with a '(T)' in his list that he had seen a syntype.

Coccinella hexaspilota Hope, 1831: 30 Nepal

Aiolocaria hexaspilota (Hope)

LECTOTYPE male (here designated), 'Hardw Bequ [printed, label cut short]/ 4190 [part of early BM catalogue label]/ sex-spilota Hope n. India [Adam White's hand]' (BMNH). PARALECTOTYPES 2: 1 female, 'rdwi Beque [label cut short both ends]/ 6 spilota Hope' (BMNH); 1, '23./ 6 spilota mihi [Hope's hand]/ TYPE Col: 1915'.

Two specimens were originally received by the BM according to Samouelle's Register and both are extant. Although the specific name is usually known as *hexaspilota*, following Crotch (1874: 178), Mulsant (1850: 235) referred to it as *sexspilota*. His indication of *type* after Hope's name cannot be accepted as an adequate lectotype selection.

Adalia hopii Mulsant, 1850: 57, see *Coccinella tetraspilota* Hope, 1831: 31

Mulsant (1850) incorrectly proposed this name as a replacement for *Coccinella tetraspilota* Hope, 1831: 31, presumably because Hope used the name again in 1843.

Clynis humilis Mulsant, 1850: 136, 1023 'l'île St-Vincent, dans les Antilles (coll. Hope)'

Clynis humilis Mulsant

HOLOTYPE '10./ St Vincentii Guildeng'.

Mulsant (1850: 135) refers to 'l'exemplaire unique, ... privé de ses antennes'. The holotype lacks all but segments 1 and 2 of both antennae. Although the generic name *Cleis* was used by Mulsant (1850: 135), he corrected the generic name to *Clynis* (p. 1023). *Cycloneda delauneyi* Fleutiaux & Sallé would appear to be a junior synonym.

Epilachna implicata Mulsant, 1850: 837 'les Indes orientales (collect. Germar et Schaum, Hope, Reiche, Westermann)'

Epilachna implicata Mulsant

LECTOTYPE female (designated by Kapur 1959: 656), 'Mysore/ 103./ Lectotype (1959) *Epilachna implicata* Muls ♀ Designated by A.P. Kapur det 1959 Calcutta/ TYPE Col: 1957'.

This species is not a variety of *E. vigintioctopunctata* (Fabricius) as listed by Crotch (1874: 87), but comes close to *E. pusillanima* Mulsant. The female genital coxites of the lectotype were dissected out by Kapur, and these are very similar to those of *E. pusillanima*. However, it differs from the latter by having the elytra more rounded and less produced apically, the sutural angles are less broadly rounded and the sides of the elytra are straight declivous, without the weak lateral explanation or 'gutter'. It is similarly differentiated from *E. septima* Dieke, which has very different female genital coxites. The lectotype has been matched with two specimens in BMNH, also from southern India. We have examined a female paralectotype from Westermann's collection, but this is not conspecific. Westermann's specimen appears to be *E. septima* Dieke, but it was not dissected to confirm this.

Kapur (1959) figured and redescribed the lectotype, and described the male genitalia. Additional specimens of both sexes received in 1989 for identification by C.A.B. International Institute of Entomology confirm Kapur's interpretation.

Alesia inclusa Mulsant, 1850: 349 'le cap de Bonne Espérance (collect. Chevrolat, Hope, Reiche); la Cafrerie (Muséum de Stockholm)'

Declivitata inclusa (Mulsant)

LECTOTYPE in UCCC (designated by Gordon 1987: 21). PARALECTOTYPES 3: 1, '40./ Cpe/ Lectotypus Alesia inclusa Mulsant indication: Fürsch 1985 [Fürsch's hand]/ TYPE Col: 1923'; 2, 'CBS'.

Fürsch (1987: 16) selected the Oxford syntype as the lectotype, but this selection is antedated by just over five months by that of Gordon (1987). The species is briefly redescribed and figured by Fürsch (1987).

Epilachna infausta Mulsant, 1850: 786 'Java (collect. Buquet, Hope)'

= *Epilachna vigintioctopunctata* (Fabricius)

LECTOTYPE female (here designated), '57.71 [BMNH accession number]/ Infausta Muls. Java [yellow Buquet collection label]/ Named by Mulsant [printed]' (BMNH). Other material: 1 male, 'Java Bur... [remainder of name illegible]/ 32./ W/ 32 - infausta [Mulsant's hand]/ Epilachna sparsa Hbst det H. Fürsch 57/ TYPE Col: 1951'.

The lectotype is probably an example of *E. vigintioctopunctata* (Fabricius), although the possibility of it being a similar species cannot be ruled out. It has not been dissected.

Mulsant's original description refers to material in Hope's collection, but this is presumably in error, because the name does not appear on his manuscript list. The Westwood specimen referred to above is an example of *E. vigintioctopunctata* (Fabricius), but has no type status.

Leis instabilis Mulsant, 1850: 259 'le Cap de Bonne-Espérance (collect. Hope, Perroud, Reiche)'

= *Harmonia vigintiduomaculata* (Fabricius)

LECTOTYPE in UCCC (designated by Gordon 1987: 14).

Leis instabilis is not on Mulsant's list of Hope's material, and so Hope's name in the above list of collections is probably in error.

Orcus janthinus Mulsant, 1850: 466 'Java (collect. Buquet, Hope, Reiche, Westermann)'

Orcus janthinus Mulsant

LECTOTYPE in UCCC (designated by Gordon 1987: 23). PARALECTOTYPES 2: 1, '64./ Java/ 234/ TYPE Col: 1927'; 1, '57.71 [BMNH accession number]/ Janthinus. Reiche. Muls Java. [yellow Buquet collection label]/ Named by Mulsant [printed]' (BMNH).

The genus *Orcus* was redescribed by Chapin (1965: 260), together with figures of the genitalia of *O. janthinus*.

Leis javana Mulsant, 1850: 245 'Java (collect. Dejean, type); île du prince de Galles (Hope)'

= *Coelophora duvaucelii* Mulsant

SYNTYPE female, '27./ PWI [i.e. Prince of Wales Island]/ TYPE Col: 1948'.

The synonymy was established by Crotch (1874: 148, as *Cyphocaria*). *Cyphocaria* was synonymised with *Lemnia* by Iablokoff-Khnzorian (1982: 218) and *Lemnia* was treated as a synonym of *Coelophora* by Pope (1989: 662).

Oenopia kirbyi Mulsant, 1850: 425 'les Indes orientales (collect. Hope)'

Oenopia kirbyi Mulsant

LECTOTYPE (here designated), '54./ K. Hills [i.e. Kasia Hills]/ ? Oenopia kirbyi Muls. I have been unable to trace the name 4-signata but the specimen agrees with descr. of kirbyi E. Taylor 22.v.1947'.

Number 54 on Mulsant's manuscript list refers to a name 'Oenopia 4 signata', but no such name was ever published. There can be no doubt that Mulsant changed his mind about the name for this species, and the above specimen is designated as the lectotype of *O. kirbyi* because it agrees with the original description and its subsequent interpretation.

Epilachna lacertosa Mulsant, 1850: 838 'les Indes orientales (Westwood)', as a variety of *Epilachna implicata* Mulsant

= *Epilachna vigintioctopunctata* (Fabricius)

HOLOTYPE 'E. Ind Heassey/ 39./ W/ 39 - implicata var lacertosa [Mulsant's hand]'.

The holotype is an ocellated form of Fabricius' species. Crotch (1874: 87) listed *lacertosa* and some other Mulsant names as varieties of *E. vigintioctopunctata*.

Brachyacantha lepida Mulsant, 1850: 523 'le Mexique (collect. Chevrolat, Dejean (*type*) Dupont, Reiche, Trobert, Westwood; Muséum de Paris)

Brachiacantha lepida Mulsant

LECTOTYPE in Dejean Collection, Lyon (designated by Gordon 1985: 599). PARALECTOTYPES: 2 on same card, 'Mex Coffin/ 26./ W/ 26 - lepida [Mulsant's hand]'.

This common and well-known Central American species was figured in Gorham (1887- 1899) and also briefly redescribed by Gordon (1985). Gordon (1985: 599) refers to a paralectotype in BMNH, but this is incorrect, since the specimen in question came from Buquet's collection, which was not listed in the original description.

Scymnus levaillanti Mulsant, 1850: 964 'la Sicile (collect. Westwood)'

Scymnus levaillanti Mulsant

No specimens bearing any labels indicating this name could be found, nor could any specimens fitting the original description be located. It must therefore be assumed that the original material has been lost. The only number remaining unaccounted for on our reconstructed list of Westwood's material is 48, and it is more than likely that this should belong to *S. levaillanti*, falling as it does in the same species sequence as used by Mulsant (1850). Some other specimens of Scymninae from Westwood's collection bear labels such as 'Sicily Melly'; it may just be possible that topotypical specimens fitting the original description of *S. levaillanti* could be found in Melly's collection.

The current interpretation of *S. levaillanti*, as a species in the *Scymnus* (*s. s.*) *nubilus/ moreletii* complex, is surely incorrect. In the original description, Mulsant placed *S. levaillanti* in his subgenus *Nephus*, and referred to its oblong shape, and non-sinuate base of the pronotum; none of these characters fit the current interpretation, quite apart from the obvious differences in colouration.

Cleothesa levrati Mulsant, 1850: 613 'le Mexique (collect. Dupont, Hope)'

Hyperaspis levrati (Mulsant)

LECTOTYPE (here designated), '73./ Mex'.

Gorham (1894: 192) referred to this species, men-

tioning a specimen from Brazil in Crotch's collection. If this specimen is conspecific with the lectotype, it may indicate that Hope's specimen is incorrectly labelled (see also, for example, the notes under *Chnoodes fallax*). This would help to explain why *H. levrati* has not been found again in Central America. Gordon (1985: 459) referred specimens from the southern United States bordering Mexico to this species, but this is incorrect, because the lectotype matches neither his illustration, nor the two specimens in the BMNH referred to as 'types' by him. These latter two specimens cannot be syntypes because the number on the specimen with any data shows that it was given to Waterhouse by Deyrolle, who was not listed in the original description. Dupont's material should be in the Sicard collection in Paris.

Compared with Gordon's interpretation, the lectotype is of a much larger species, the yellow spots are larger, and the humeral and mid-lateral yellow spots are distinct from the edges of the elytra; the apical spot alone reaches the margin.

Scymnus loewii Mulsant, 1850: 980 'le Mexique (collect. Reiche, Westwood)'

Scymnus loewii Mulsant

LECTOTYPE in UCCC (designated by Gordon 1976: 122). PARALECTOTYPE (determined by Gordon 1976: 122), '51./ Mex Coffin/ W/ 51 - Loewii [Mulsant's hand]/ Paralectotype Scymnus loewii Muls. R. Gordon 1972/ TYPE Col: 1935'.

This common species from the southern United States and Mexico was redescribed by Gordon (1976).

Oenopia (Pania) luteopustulata Mulsant, 1850: 421 'le royaume d'Assam (collect. Hope)'

Pania luteopustulata (Mulsant)

HOLOTYPE '52./ Assam/ TYPE Col: 1919'.

lablokoff-Khnzorian (1979: 58) raised Mulsant's subgenus *Pania* to generic status.

Epilachna macularis Mulsant, 1850: 797 'le Népaül (collect. Hope); Assam (Reiche)'

Epilachna macularis Mulsant

LECTOTYPE in UCCC (designated by Gordon 1987: 9). PARALECTOTYPE male, 'K. Hills [i.e. Kasia Hills]/ 96./ TYPE Col: 1950'.

Although the Kasia Hills are not in Nepal, there is no reason not to accept Hope's specimen as an original syntype. Under other species, Mulsant quoted different localities for specimens labelled 'K. Hills' (see for example, *Epilachna dodecostigma* and *E. mystica*).

The species was redescribed and figured by Dieke (1947).

Daulis maeander Mulsant, 1850: 335
'Cayenne (collect. Buquet, Dejean, type); le Mexique (Hope)'

Cycloneda maeander (Mulsant)

SYNTYPE '38./ Mex/ TYPE Col: 1910'.

This specimen was once pinned, but has subsequently been carded. Compared with Buquet's syntype (BMNH), Hope's specimen has its dark brown spots less coalesced and more distinct, and the lateral border paler.

Coccinella marginicollis Hope, 1831: 31 Nepal

Epilachna marginicollis (Hope)

LECTOTYPE (here designated), 'Hardwicke Bequest [printed]/ marginicollis Hope 4202 [early BM catalogue label]' (BMNH). PARALECTOTYPES 2: 1, 'Hardwicke Bequest [printed]' (BMNH); 1, '80./ marginicollis [Hope's hand]/ TYPE Col: 1966'.

Although Samouelle's Register recorded three specimens from the Hardwicke bequest, only two remain.

The species is figured by Kapur (1958), its genitalia are described and figured by Miyatake (1967), and it is redescribed in detail by Bielawski (1979).

Lemnia melanota Mulsant, 1850: 381 'les Indes orientales (collect. Dejean, Hope, Westermann; Muséum de Paris)'

= *Coelophora saucia* (Mulsant) **syn. n.**

LECTOTYPE female (here designated), '47./ India. or [printed in italics on label with a thick and thin black top border]/ Fabrici Hope E. Ind [Hope's hand]/ TYPE Col: 1920'.

The lectotype is a very old specimen; its printed label resembles those in Banks' collection (BMNH). Mulsant (1850: 382) lists Hope's manuscript name, as *Coccinella Fabricii*, after his diagnosis.

Although *L. melanota* has been regarded as a colour form of *Coelophora biplagiata* (Swartz) by, for example, Korschefsky (1932) and Iablokoff-Khnzorian (1982), its pronotal colouration and male genitalia show it to be a colour form of *C. saucia*.

Coccinella miniata Hope, 1831: 30 Nepal (nec Germar, 1824)

= *Palaeoneda auriculata* (Mulsant)

LECTOTYPE female (here designated), 'miniata fabr./ miniata 4189 [early BM catalogue label]/ Hardwicke Bequest [printed]' (BMNH).

Only a single specimen was received from Hardwicke according to Samouelle's Register, and Hope did not apparently retain any specimens for his own collection.

Crotch (1871: 5, 1874: 32) pointed out that Hope's *Coccinella miniata* was preoccupied, yet later, he (1874: 178) and subsequent authors have continued to use Hope's name for this species. It must be replaced by *Palaeoneda auriculata* (Mulsant), as first indicated by Crotch's synonymy (1871: 5).

Epilachna mystica Mulsant, 1850: 841 'les Indes orientales? (collect. Hope)'

Epilachna mystica Mulsant

LECTOTYPE (here designated), '104./K. Hills [i.e. Kasia Hills]/ TYPE Col: 1965'.

This characteristically patterned species was redescribed and figured by Dieke (1947) among others.

Scymnus nubilus Mulsant, 1850: 972 'le royaume d'Assam (collect. Hope)'

Scymnus nubilus Mulsant

LECTOTYPE (here designated), '116./ Assam/ TYPE Col: 1933'.

The lectotype is a rather dull or clouded specimen (hence its specific name) of what is normally a pale testaceous species with a dark sutural stripe. It is a very common Indian species and specimens of both colour forms among BMNH material have identical genitalia. Bielawski (1972: 293) figured the genitalia, but his habitus figure shows a specimen with a partly darkened lateral elytral border. *Scym-*

nus lateralis Sicard, 1912 was described on the basis of a specimen with a partially darkened lateral border, and this name should fall as a synonym of *S. nubilus*. **Syn. n.**

Scymnus nubilus is a member of a widespread complex of Old World species including the species currently, though probably incorrectly, named *S. levallanti* from the Mediterranean, *S. morelleti* Mulsant from Africa, *S. constrictus* from the Indian Ocean, and probably *S. nigrosuturalis* Kamiya from the Ryukyus and Micronesia.

Scymnus oblongosignatus Mulsant, 1850: 960
'Île Maurice (collect. Westwood)'

Nephus oblongosignatus (Mulsant)

LECTOTYPE (here designated), '47./ Mauritius Templeton/ W/ 47 - oblongosignatus [Mulsant's hand]/ TYPE Col: 1936'. Other material, 6 specimens on 2 cards, 'W Mauritius Templeton [large blue kite-shaped label]'.

This species was redescribed and figured by Chazeau et al. (1974).

Coccinella octodecimpilota Hope, 1843: 64
Chusan, China

= *Harmonia axyridis* (Pallas)

LECTOTYPE male (here designated), 'China Dr Cantor/ China 79.37 [BMNH accession number]/ 18 spilota Hope' (BMNH). PARALECTOTYPE female, 'China Dr Cantor/ Coccinella 18 spilota. Hope. China (Cantor)/ Leis axyridis v. [Crotch's hand]/ Ind. Mus 79.64 [printed]' (BMNH).

This species was not recognised by Mulsant (1850: 1051), but Crotch (1874: 41, 123) correctly established the above synonymy after inspecting the types in the 'India Museum'. The collections from the East India Company Museum were acquired, in part, by the British Museum in 1879. Both specimens agree with the current restricted concept of *H. axyridis* as interpreted by Sasaji (1981).

Epilachna oculatea Mulsant, 1850: 791
'le Nepaul (collect. Hope)'

= *Epilachna ocellata* Redtenbacher

LECTOTYPE male (here designated), 'Nepal K/ 92./ TYPE Col: 1962'.

Mulsant thought that this species could be *E. ocellata*, but he wasn't sure about Redtenbacher's origi-

nal description. The synonymy stems from Crotch (1874: 87).

Azya orbiger Mulsant, 1850: 930 'la Colombie (collect. Guérin, Hope, Reiche, Sallé); le Mexique (Chevrolat)'

Azya orbiger Mulsant

LECTOTYPE in UCCC (designated by Gordon 1980: 165). PARALECTOTYPE female, '113./ Bog/ TYPE Col: 1938'.

This species was redescribed by Gordon (1980), and Hope's specimen appears to be correctly identified.

Epilachna parryi Mulsant, 1850: 750
'l'Afrique méridionale (collect. Hope)'

= *Epilachna canina* (Fabricius)

Male specimen labelled 'Gambia/ 82./ TYPE Col: 1963/ H. Fürsch det 1958 *Epilachna chrysomelina* (F.) Muls. [now auct. not Fabricius] non *Afissa Dieke* Daher sicher verwechslung Kein Typus?'

The labels are the correct original ones, but as Fürsch notes 'therefore a certain mix up not type'; the original specimen has been replaced with another which has nothing to do with the original description. Crotch (1874: 68) clearly saw the correct specimen as he noted 'the type in Hope's collection does not seem to me to differ from *E. canina*'. However, Fürsch (1985: 203) refers to a 'holotype female in Oxford' which he had studied. This specimen has not yet been located.

Chilocorus politus Mulsant, 1850: 455 'le Népaul (collect. Hope)'

Chilocorus politus Mulsant

LECTOTYPE (here designated), '60./ polita NS Nepal Hope [Hope's hand]/ Type Col: 1968'. PARALECTOTYPE '121./ Cantor [i.e. Dr. T. Cantor]'.

Mulsant records the species as '*Chilocorus politus*, Hope, in collect.' after his diagnosis, so the specimen bearing Hope's label is selected as the lectotype. This species is listed twice on Mulsant's manuscript list of Hope's material. The lectotype appears to originate from Hardwicke's collection, and there are two further specimens in the BMNH from Hardwicke's bequest. These two specimens are not syntypic, but are almost certainly topotypic with the lectotype.

Neda princeps Mulsant, 1850: 278 'port Esington, nouvelle Hollande (collect. Hope)'

Antineda princeps (Mulsant)

LECTOTYPE (designated by Pope 1989: 645), '32./ P. Ess. [Hope's hand]/ princeps Hope P Essing [Hope's hand]/ TYPE Col: 1921'.

The species has been redescribed by Iablokoff-Khnzorian (1982) and Pope (1989).

Coccinella pubescens Hope, 1831: 31 Nepal (nec Panzer, 1794; nec Fabricius, 1798)

= *Epilachna vigintioctopunctata* (Fabricius)

LECTOTYPE female (here designated), 'pubescens Hope/ Hard Beq [printed, label cut short]/ ♀, Genitalia prepared on 21-9 55 A.P.K. [Kapur's hand]' (BMNH). PARALECTOTYPE 'Hardw Bequ [printed, label cut short]/ pubescens Hope 4201 [early BM catalogue label]' (BMNH).

The lectotype was dissected by Kapur, and the genitalia and abdomen are mounted between coverslips pinned below the specimen. The paralectotype has lost its abdomen. Samouelle's Register records two specimens received from Hardwicke, so both are extant.

The synonymy was correctly established by Mulsant (1850: 837).

Psyllobora punctella Mulsant, 1850: 173 'l'île Saint-Vincent, dans les Antilles (collect. Hope)'

Psyllobora punctella Mulsant

LECTOTYPE female, 'punctatus Guild. St Vincit [i.e. St Vincent, Windward Islands, collected by Rev. Guildeng; Hope's hand, the last word becoming somewhat illegible]/ 17./ TYPE Col: 1912'. PARALECTOTYPE 1, 'modesta Hope St. Vincent'.

The lectotype is in poor condition; it was originally pinned, but is now carded, having been previously dissected rather crudely. It is rather pale and slightly teneral and the markings on the pronotum are very indistinct. Except for the spot on the humeral callus, the other elytral markings are very pale.

Although Mulsant (1850: 174) refers to '*Coccinella punctella*, Hope, in collect.' after his diagnosis, the label on the lectotype reads 'punctatus'. The species is also known from Grenada and the Grenadines in the Windward Islands (specimens in BMNH).

Epilachna pusillanima Mulsant, 1850: 784 'Java (collect. Dejean, Westermann); les Indes orientales (Buquet, Chevrolat, Hope)'

Epilachna pusillanima Mulsant

LECTOTYPE male in UCCC (designated by Li & Cook 1961: 44, as Type; the same specimen also designated by Gordon 1987: 9). PARALECTOTYPES 2 females: 1, 'Bengal/ 89./ TYPE Col: 1958'; 1, '57.71 [BMNH accession number]/ Pusillanima. Muls. Ind: Orient [yellow Buquet collection label]/ Named by Mulsant [printed]' (BMNH).

Hope's specimen appears to be conspecific with the lectotype which was redescribed and figured by Li & Cook (1961). The BMNH paralectotype, which was dissected by Kapur, is not conspecific, but is a specimen of *E. vigintioctopunctata* (Fabricius).

This is a widely distributed oriental species and is also known from the Indian subcontinent, where it was redescribed by Kapur (1967) under the name *Epilachna dodecastigma* (Wiedemann) (see above).

Coccinella quindecimmaculata Hope, 1831: 30 Nepal

= *Harmonia dimidiata* (Fabricius)

LECTOTYPE (here designated), '28./ 15 maculata [Hope's hand]/ TYPE Col: 1947'. PARALECTOTYPE male, 'Leis 15-maculata, type Hope [Gilbert Arrow's hand]/ Hardwi Beque [printed, label cut short]' (BMNH).

When the Hardwicke material was received at the British Museum, there were no specimens labelled *15 maculata*, as this name does not appear in any of the catalogues of the time, presumably because the labels had fallen off. All the other Hope (1831) coccinellid names are represented by Hardwicke specimens in BMNH, and Hope retained only duplicate specimens. In this case however, the lectotype is selected from one of Hope's retained specimens, although the BMNH Hardwicke specimen matching the lectotype is accepted as a paralectotype.

Crotch (1874: 122) synonymised this and the next species name, but the synonymy with *H. dimidiata* was established by Sicard (1913), who regarded them only as varieties or aberrations of '*Leis dimidiata*'.

Coccinella quindecimspilota Hope, 1831: 30 Nepal

= *Harmonia dimidiata* (Fabricius)

LECTOTYPE male (here designated), 'Leis 15-spilota, type Hope [Gilbert Arrow's hand]/ Hardwicke Bequest [printed]/ 15-spilota. Hope 4191 [early BM catalogue label]' (BMNH). PARALECTOTYPES 2 females: 1, '29./ 15 spilota [Hope's hand]'; 1, 'Hardwicke Bequest [printed]' (BMNH).

Three specimens of this species name were originally received from Hardwicke according to Samouelle's Register, but only two remain. It is, however, more than likely that the third specimen is the paralectotype of *Coccinella quindecimmaculata* referred to immediately above (which see for synonymy).

Hope's original description stated that the pronotum was immaculate, whereas that of the lectotype has two very faint marks. In addition, the lectotype lacks the small black spots near the sutural angle. Although the female BMNH paralectotype fits the original description slightly better than the male lectotype, the latter specimen bears the early catalogue label.

Epilachna retexta Mulsant, 1850: 793, as a variety of *Epilachna oculea* Mulsant

= *Epilachna ocellata* Redtenbacher

HOLOTYPE '93./ Assam'.

The holotype is just a pale specimen of *E. ocellata*.

Psyllobora roei Mulsant, 1850: 187 'le Me-
xique (collect. Hope)'

Psyllobora roei Mulsant

HOLOTYPE '20./ 56 [pale ink on pink rectangle]/ Mex/
Roei Hop. G.R. [Hope's hand]/ 20 Psyllobora Roei Muls
Type Mus Hope/ TYPE Col: 1913'.

This is a very characteristic species, and was figured by Gorham (1887–1899). The locality datum on the holotype is probably incorrect, because the species is not otherwise known from Mexico.

Rodolia rubea Mulsant, 1850: 903 'Java (col-
lect. Buquet); les Indes orientales (Hope)'

Rodolia rubea Mulsant

LECTOTYPE (here designated), '57.71 [BMNH accession number]/ 181. [pale yellow disc]/ Rubea Muls. Java [yellow Buquet collection label]/ Named by Mulsant [printed]' (BMNH). PARALECTOTYPE 1, '108./ PWI [i.e. Prince of Wales Island]'

Mulsant used an unpublished name, 'Rodolia rubiginosa', on his manuscript list of Hope's material, but there seems little doubt that the specimen accepted above as the paralectotype was the one referred to under the original description of *R. rubea*.

Chilocorus rubidus Hope, 1831: 31 Nepal

Chilocorus rubidus Hope

LECTOTYPE (here designated), 'rubidus Hope/ Hardwicke Bequest [printed]' (BMNH). PARALECTOTYPES 14: 1, 'Hardwicke Bequest [printed]/ rubidus Hope 4214 [early BM catalogue label]' (BMNH); 7, 'Hardwicke Bequest [printed]' (BMNH); 1, 'Nep/ 58./ rubidus Hope Nepal [Hope's hand]/ TYPE Col: 1967'; 1, 'Nep'; 1, '[small yellow rectangle with black line along one edge; part of a larger yellow label with Hardwicke. Nepal printed on it]/ rubidus'; 2 '[small yellow rectangle as before]'; 1, without data.

Although Samouelle's Register lists three specimens of this species, there are currently nine Hardwicke specimens in the BMNH. Perhaps the three specimens recorded were from Hardwicke's main collection drawers and the other six came from his duplicates. It is unlikely that Hope would have kept six specimens and only returned three to Hardwicke. For this reason, all Hardwicke's specimens are regarded as original syntypes. Some of the paralectotypes in BMNH bear small labels with printed numbers, of no known significance. The Oxford specimen without data had the same kind of pin and style of mounting as the rest of the type series.

The species was redescribed and its genitalia figured by Kapur (1956) and Nagaraja & Hussainy (1967).

Chilocorus ruficeps Mulsant, 1850: 457 'le
Sénégal (collect. Dejean, type, Hope); la
Guinée (Muséum de Paris); l'Abyssinie
(Guérin); la Cafrerie (Chevrolat; Muséum
de Stockholm); le cap de Bonne-Espérance
(Melly)'

= *Chilocorus distigma* (Klug)

SYNTYPE '61./ S. Leone/ flaviceps Hope SL [Hope's hand]/ TYPE Col: 1928'.

Mulsant (1850: 458) refers to '*Chilocorus flaviceps*, Hope, in collect.' after his diagnosis, but fails to

note that Hope's specimen was from Sierra Leone and not from Senegal.

The above synonymy was established by Crotch (1874: 184), but was suspected by Mulsant (1850: 1033).

Novius sanguinolentus Mulsant, 1850: 943 'l'Australie (collect. Westwood)'

Rodolia sanguinolenta (Mulsant)

LECTOTYPE (here designated), '45./ W/ S. Austral./ 45 Novius sanguinolentus [Mulsant's hand]/ TYPE Col: 1942'.

Lemnia saucia Mulsant, 1850: 380 'le Népaül (collect. Guérin, Hope)'

Coelophora saucia (Mulsant)

LECTOTYPE in UCCC (designated by Gordon 1987: 18). PARALECTOTYPES 2: 1 lacking head and pronotum, 'Nep [? Hope's hand]/ TYPE Col: 1924'; 1, 'Nep/ plagiatu?'

Crotch (1874: 148) first synonymised *Lemnia* with *Coelophora*, and although Iablokoff-Khinzorian (1982) considered the former as a distinct genus, Pope (1989) considered it as a synonym of *Coelophora*.

Although neither of the paralectotypes now carries Mulsant's yellow numbered label, we assume that it was present on the first paralectotype when E. Taylor originally identified the specimen as a syntype and added his 'TYPE Col: ' label. In addition, there are eleven old specimens of this species without data from Hope's collection.

Chilocorus schioedtii Mulsant, 1850: 456 'la Guinée (Muséum de Copenhagen); Sierra Leone (Hope)'

Chilocorus schioedtei Mulsant

LECTOTYPE (here designated), '59./ S. Leone/ savagei Hope SL [Hope's hand]/ TYPE Col: 1929'.

The specimen is in poor condition, having previously been glued back together onto its card mount. However, it is readily recognisable, and shows that the interpretation of the species by Greathead & Pope (1977) was correct.

Mulsant (1850: 456) recorded the species as '*Chilocorus sardgei*, Hope, in collect.' after his diagnosis, a slight misinterpretation of Hope's original label.

Brachyacantha sellata Mulsant, 1850: 522 'le Brésil (collect. Buquet, Dejean (*type*), Doué, Dupont, Germar et Schaum, Hope, Trobert; Muséum de Paris)'

Brachiacantha sellata Mulsant

SYNTYPE female, '70./ Br. [i.e. Brazil]/ Cape/ TYPE Col: 1932'.

Daulis separata Mulsant, 1850: 298 'la Colombie (collect. Guérin, Hope, Reiche, etc.)'

Cycloneda separata (Mulsant)

LECTOTYPE in UCCC (selected by Gordon 1987: 20).

This name does not appear on Mulsant's manuscript list of Hope's material, and so the inclusion of Hope's name among the list of collections cited above is probably in error. This error is confirmed, because of the correction made by Mulsant (1850: 1033), deleting a Hope manuscript name from after the diagnosis of *D. separata* and adding it to the list following *D. sedecimnotata* on p. 297. *Daulis sedecimnotata* is included on Mulsant's list of Hope's material.

Epilachna sexnotata Mulsant, 1850: 807 'le Bengale (collect. Hope)'

Rodolia sexnotata (Mulsant) **comb. n.**
= *Rodolia guerinii* (Crotch) **syn. n.**

LECTOTYPE female (here designated), '99./ 99 Epilachna 6-notata Muls. Type Mus. Hope [unknown hand]/ TYPE Col: 1972'.

Crotch (1874: 89) remarked 'The type is in bad condition, but appears to me not to be a true *Epilachna*'. It was listed as an *Epilachna* by Korschefsky (1931), but under '*Species incerta sedis*'.

Coccinella sexspilota Hope, 1831: 30, see *Coccinella hexaspilota* Hope

Vedalia sieboldii Mulsant, 1850: 905 'le Mexique (collect. Westwood)'

Vedalia sieboldii Mulsant

LECTOTYPE (here designated), '210 [thin card disc]/ Mex Coffin/ 43./ EST [on reverse of plain green rectangle]/ W/ 43 Vedalia sieboldi [Mulsant's hand]'

This species was commented on and figured by Gorham (1897).

Epilachna signatula Mulsant, 1850: 784 (les Philippines), as a variety of *E. diffinis* (Eydoux & Souleyet)

? = *Epilachna vigintioctopunctata* (Fabricius)

? SYNTYPE male, '88./ Manilla/ TYPE Col: 1952'.

Mulsant's manuscript list of Hope's collection reads '88 - diffinis (stigmula)', but in his published work, Mulsant (1850: 782) referred only to a single specimen in Reiche's collection, labelled as *Epilachna stigmula*, which was treated after the redescription of *E. undecimvariolata* (Boisduval). This is, therefore, probably another example of the manuscript name not matching the final published name, because Mulsant (1850: 784) does discuss a variety of *E. diffinis*, but uses the name *E. signatula* instead. Since Hope's specimen does match the locality noted by Mulsant for this latter species (the Philippines) and has a pale pronotum without any black spots, it is probably one of the specimens referred to by Mulsant as the variety *E. signatula*. Hope's specimen is, however, an example of *Epilachna vigintioctopunctata* (Fabricius).

Epilachna smithi Mulsant, 1850: 868 'le cap de Bonne-Espérance (collect. Hope; Muséum britannique)'

Epilachna smithi Mulsant

LECTOTYPE (here designated), 'CGH/ 105./ TYPE Col: 1791'. PARALECTOTYPE 1, 'Ent. Club 44-12' (BMNH).

Crotch (1874: 75) remarked that 'The specimen cited from the British Museum seems to have disappeared'. This remark is hardly surprising, since the specimen bore no identification label, and was only rediscovered when the BMNH collection was searched with Hope's specimen for comparison. Hope's specimen is selected as the lectotype since its data are unequivocal, but the BMNH specimen is accepted as a paralectotype since it was acquired by the Museum in 1844, i.e. about four years before the collections were examined by Mulsant.

Epilachna socors Mulsant, 1850: 791 'Indes orientales; Hope', as a variety of *Epilachna gradaria* Mulsant

= *Epilachna vigintioctopunctata* (Fabricius)

HOLOTYPE '123./ Khasyah Hills [i.e. Kasia Hills]'.

This is another example of Fabricius' species.

Aspidimerus spencii Mulsant, 1850: 944 'les Indes orientales? (collect. Hope)'

Aspidimerus spencei Mulsant

LECTOTYPE (selected by Kapur 1948: 83, as Type female), 'K. Hills [i.e. Kasia Hills]/ 114./ TYPE Col: 1930'.

The species was redescribed by Kapur (1948).

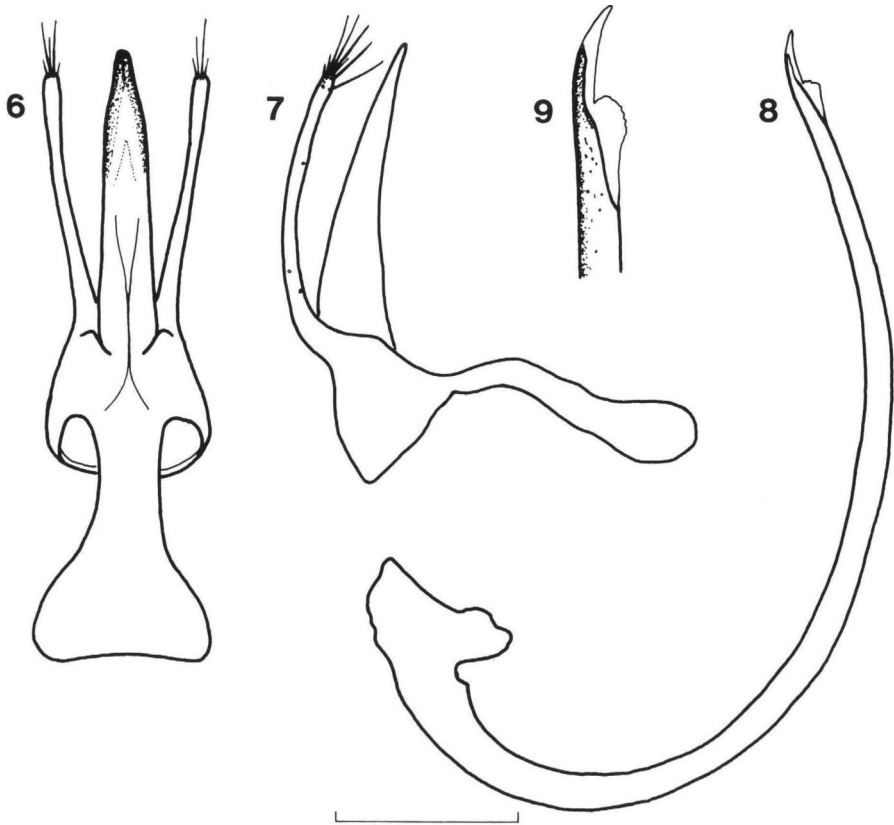
Epilachna stephensi Mulsant, 1850: 879 'les Indes orientales? (collect. Hope)'

Afidentula stephensi (Mulsant) **comb. n.**

LECTOTYPE (here designated), '107./ K. Hills [i.e. Kasia Hills]/ TYPE Col: 1970'.

The lectotype was originally pinned through the right elytron, but is now carded, unfortunately minus its abdomen. It fits the original description and size well. The species is very similar to *Afidentula manderstjernae* (Mulsant), with which it was mixed in the BMNH series and by Kapur (1958). *A. stephensi* may be separated from *A. manderstjernae* as follows:- dark spot near elytral apex present, spot 1 on suture immediately behind scutellum, sutural angles of elytra almost right angled, lateral elytral bead very thick and gutter well developed, male genitalia smaller (Figs. 6-9) (based on a specimen from Gori Valley, Kumaon, 7000 ft, N. India). In *A. manderstjernae* (as interpreted by Kapur (1958)), the elytra lack a dark subapical spot, spot 1 does not reach the suture, the sutural angles are somewhat produced and rounded apically but with a small denticle at the suture, the lateral elytral bead is much narrower and the gutter is less developed, and the male genitalia are larger.

Crotch (1874: 81) referred *stephensi* to *Il-spilota* Hope, but this was clearly incorrect and Korschefsky (1931: 31) listed it as a valid species. Dieke (1947) added to Crotch's confusion and Iablokoff-Khuzorian (1972: 169) mistakenly claimed that the type was in the Motschulsky collection (this latter specimen may well have been determined subsequently by Mulsant since he described *Epilachna manderstjernae* in 1853 from Motschulsky's collection). Kapur's (1958) interpretation of *A. manderstjernae* was based on a mixed series of *manderstjernae* and *stephensi*, because, of the four specimens returned to the BMNH, two can now be referred to



Figs. 6-9. Male genitalia of *Afidentula stephensi* (Mulsant): (6) median lobe, parameres, trapes, ventral view; (7) same, lateral view; (8) siphon; (9) siphonal apex. (Scale marker = 0.25 mm, Figs. 6-9; 125 μ m, Fig. 9)

each species. Kapur's (1958) figures 7e and 7f appear to be *stephensi* and not *manderstjernae*. While the male genitalia figured for *A. manderstjernae* by Dieke (1947) and Pang & Mao (1979) appear identical, they both differ slightly from those of Kapur (1958).

Kapur (1958: 324) erected his new genus *Afidentula*, with *A. manderstjernae* as the type species, and, in addition to the distinguishing characters originally quoted, the lack of apical tibial spurs supports the separation of these small, rather convex species from the genus *Epilachna*, even in its broad sense.

Exoplectra stevensi Mulsant, 1850: 921 'le Mexique (collect. Westwood)'

Exoplectra stevensi Mulsant

LECTOTYPE (here designated), '16 [card disc]/ 44./ Mex Coffin/ W/ 44 *Exoplectra stevensi* [Mulsant's hand]'.

The interpretation of this and similar species by Gorham (1895) was rather confused, as a comparison of the BCA material in BMNH and the lectotype showed. Of the four specimens referred to by Gorham (1895: 214) under the name *E. stevensi*, the two remaining in the BMNH are not conspecific with the lectotype, but are similar to the larger *E. fucosa* Mulsant. The lectotype was, however, matched with two specimens from Puebla, standing over the name *Chnoodes sanguinipes* (Crotch) sensu Gorham (1895: 215).

Coccinella straminea Hope, 1831: 31 Nepal

Halyzia straminea (Hope)

LECTOTYPE female (here designated), 'straminea

Hope/ Hardwicke Bequest [printed]' (BMNH). PARALECTOTYPES 2: 1 female, 'Hardwicke Bequest [printed]/ straminea Hope 4203 [early BM catalogue label]' (BMNH); 1, '13./ straminea [Hope's hand]/ TYPE Col: 1969'.

Samouelle's Register records that two specimens were bequeathed to the British Museum; both are extant. The Oxford specimen is in poor condition, lacking head and pronotum.

***Coccinella succinea* Hope, 1843: 64 Chusan, China**

= *Harmonia axyridis* (Pallas)

LECTOTYPE male (here designated), 'China Dr Cantor/ Coc. succinea. Hope. China (Cantor)./ Leis axyridis v. [Crotch's hand]/ Ind. Mus. 79.64 [printed, BMNH accession number]' (BMNH).

Crotch (1874: 123) established the above synonymy. The lectotype agrees with the current restricted concept of *H. axyridis* as interpreted by Sasaji (1981).

***Epilachna taeniata* Mulsant, 1850: 771 'Java (collect. Melly); Madras (Hope)'**

***Epilachna taeniata* Mulsant**

SYNTYPE female, 'Madras/ 84./ TYPE Col: 1959'.

This specimen matches Mulsant's 'var A'; we have not selected it as the lectotype since we have not seen Melly's material. Mulsant (1850: 773–774) excluded from his main series of *E. taeniata*, several specimens to which he gave names, including *E. lyncula*. A syntype of the latter in BMNH (ex Buquet) has the side margins more explanate and the hind part of the elytra more broadly rounded than in Hope's specimen, so it could represent a different species. We have not seen enough material of either form to come to any firm conclusions.

***Coccinella tetraspilota* Hope, 1831: 31 Nepal**

***Adalia tetraspilota* (Hope)**

LECTOTYPE female (here designated), 'tetraspilota Hope/ 4210 [off-white disc, early BM catalogue number]/ Hopii Muls N. India [Adam White's hand]' (BMNH).

The lectotype lacks a 'Hardwicke Bequest' label and the early BM catalogue label is missing, although the latter is replaced by a small disc with the catalogue number written in ink. However, the old pin mounting and the first name label are typi-

cal of other Hardwicke specimens. Mulsant (1850: 57) proposed, incorrectly, the name *Adalia hopii* as a replacement name for this species, presumably because Hope (1843) re-used the name *C. tetraspilota* for a different species.

***Coccinella tetraspilota* Hope, 1843: 64 Chusan, China (nec Hope, 1831)**

= *Propylea japonica* (Thunberg)

LECTOTYPE (here designated), 'China Dr Cantor/ Coc. tetraspilota. Hope. China (Cantor)./ Propylea conglobata va. [Crotch's hand]' (BMNH).

The lectotype has lost its abdomen.

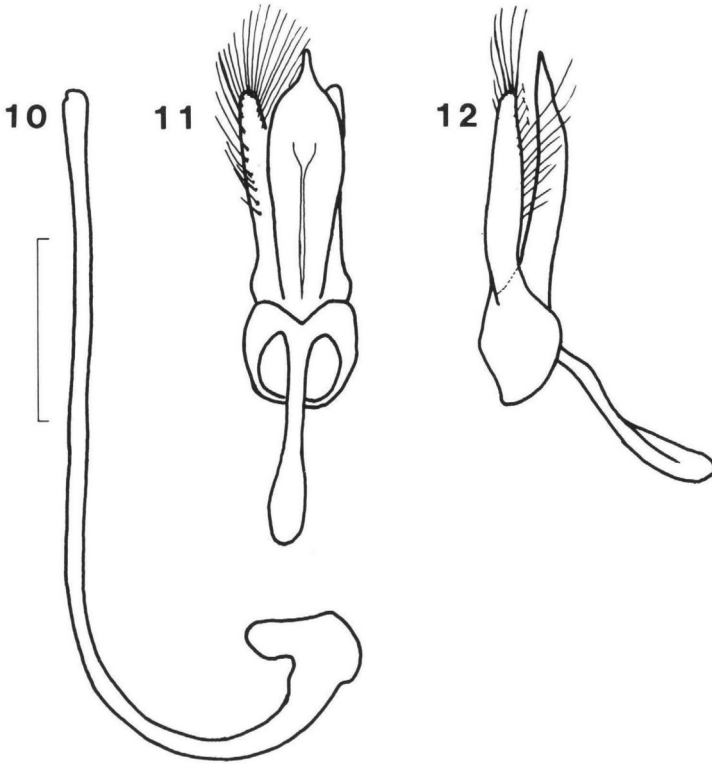
***Coccinella undecimspilota* Hope, 1831: 31 Nepal**

***Epilachna undecimspilota* (Hope)**

LECTOTYPE (here designated), '11-spilota Hope/ 11-spilota Hope 4208 [early BM catalogue label]/ Hardwicke Bequest [printed]' (BMNH). PARALECTOTYPES 2: 1 male, 'Hardwicke Bequest [printed]/ not 11-spilota (Hope) det R.G. Booth 1987' (BMNH); 1 with left elytron missing, '98./ 11 spilota [Hope's hand]/ 11 spilota Muls. not Hope [E. Taylor's label]/ Afissula rana Kapur det R.G. Booth 1987'.

Considerable confusion has surrounded this name in the past, because none of the three original syntypes so far located are conspecific. Samouelle's Register lists three specimens of *C. 11-spilota* as received by the British Museum, but only two have been located. Hope's original short description refers to the pronotum as 'margine testaceo', and this character is found only in the lectotype.

Mulsant (1850: 799) based his redescription on the single specimen shown to him by Hope, but this did not fit Hope's original description. This specimen, here accepted as a paralectotype, is an example of *Afissula rana* Kapur. Although Mulsant refers to 'l'exemplaire typique...' after his diagnosis, we do not accept this as an adequate lectotype designation. Crotch (1874: 81) noticed the discrepancy, and gave a short redescription based on the lectotype (he considered this specimen in the British Museum to be the type), although he incorrectly included *Epilachna stephensi* Mulsant as a synonym. Dieke (1947: 138) again pointed out the discrepancy, and he questioned Crotch's redescription, which was in fact correct. However, Dieke added to the confusion by redescribing under this name specimens of yet another species related to or



Figs. 10-12. Male genitalia of *Epilachna undecimspilota* (Hope): (10) siphus; (11) median lobe, parameres, trapeses, ventral view; (12) same, lateral view. (Scale marker = 0.5 mm)

possibly the same as *E. flavicollis* (Thunberg). In this, he seems to have been following, but did not acknowledge, Mader (1927), who used the name *Solanophila hendecaspilota* (Hope). Although Mader used the Greek rather than the Latin stem for the number eleven, his redescription is still based on a misidentification. Kapur (1958: 322) again referred to the confusion between the BMNH and the Oxford specimens. He described a new genus and species, *Afissula rana*, to which the Oxford paralectotype belongs. He also illustrated the lectotype (Kapur's figure 5b), referring to it as 'the type' in his discussion following the description of *A. rana*. Whether or not future authors will accredit the first valid lectotype designation to the present authors or to Kapur (1958), there is no doubt that it is the same specimen to which Crotch also referred.

The pale yellow lateral margins of the pronotum of the lectotype, contrasting with the dull red background colour of the elytra do fit Hope's original description. The male genitalia are shown in Figs. 10-12. Bielawski (1979: 105) redescribed the species

correctly, following Kapur, and figured the female genital coxites. *Epilachna tridecimmaculata* Pang & Mao is almost certainly a junior synonym, although we haven't examined their holotype. The generic placement of the species is not certain. It could be placed in *Afissula*, as it possesses the elongate antennae and general form of *A. rana*, but it differs from the latter by possessing bifid tarsal claws, the inner tooth of which is inwardly curved and much broader than the outer.

The second paralectotype, accepted here as the second of the three Hardwicke specimens to arrive at the British Museum, represents a third, and to us, unrecognised species.

***Coccinella uniramosa* Hope, 1831: 31 Nepal**

= *Calvia vulnerata* (Hope) **syn. n.**

LECTOTYPE female (here designated), 'uniramosa Hope/ uniramosa Hope 4205 Nepal [early BM catalogue label, the word Nepaul a later addition]/ Hardwicke Bequest [printed]' (BMNH).

According to Samouelle's Register, only a single example was received from Hardwicke, and there are no further specimens in Hope's collection.

Dissection of conspecific male specimens from BMNH shows that *C. uniramosa* and *C. vulnerata* are just colour forms of the same species. *C. vulnerata* is here chosen as the valid species name because it appears to represent the slightly more common colour form, although both are rare in collections.

***Coccinella univittata* Hope, 1831: 31 Nepal**

***Micraspis univittata* (Hope)**

LECTOTYPE male (here designated), 'univittata Hope/Hardwicke Bequest [printed]/ univittata Hope 4206 [early BM catalogue label]' (BMNH).

Only a single specimen was received from Hardwicke according to Samouelle's Register, and we have not located any further specimens in Hope's collection.

***Epilachna varivestis* Mulsant, 1850: 815 'le Mexique (collect. Chevrolat, Dejean, Germar et Schaum, Guérin, Melly, Perroud, Reiche, Westwood)'**

***Epilachna varivestis* Mulsant**

LECTOTYPE in UCCC (designated by Gordon 1975: 162). PARALECTOTYPE 1, 'Mex Coffin/ 37./ 357 [card disc]/ W/ 37 - varivestis [Mulsant's hand]'. Other material: 1, 'Mex/ 100./ 497 [pink rectangle]/ TYPE Col: 1961'.

The above paralectotype came from Westwood's collection. The specimen from Hope's collection, listed under other material, is excluded from the type series because Hope's name was not included among the original list of collections.

The species was redescribed by Gordon (1975).

***Leis vigintiduosignata* Mulsant, 1850: 255, 1070 'Sierra-Leone (collect. Dejean (type), Hope)'**

= *Harmonia vigintiduomaculata* (Fabricius)

SYNTYPES 3: 1 male, '30./ S.L./ TYPE Col: 1949'; 2, 'S.L.'.

The name *vigintiduosignata* is misspelt as *vingintiduosignata* in the original description (p. 255), but the correct spelling of the name is available in the index (p. 1070). Crotch (1874: 119) listed the name as

a synonym of *Stictoleis vigintiduomaculata* (Fabricius), and Iablokoff-Khnzorian (1979: 71) synonymised *Stictoleis* with *Harmonia*, although this generic synonymy was hinted at by Timberlake (1943).

***Coccinella vulnerata* Hope, 1831: 31 Nepal**

***Calvia vulnerata* (Hope)**

= *C. uniramosa* (Hope) **syn. n.**

= *C. flaccida* Mulsant **syn. n.**

= *C. vishnu* (Crotch) **syn. n.**

= *C. krishna* (Crotch) **syn. n.**

= *C. buddha* (Crotch) **syn. n.**

LECTOTYPE female (here designated), 'vulnerata Hope/ vulnerata Hope 4204 [early BM catalogue label]/ Hardwicke Bequest [printed]/ n gen Anisocaria [Crotch's hand]' (BMNH). PARALECTOTYPE 1 male, 'Hardwicke Bequest [printed]' (BMNH).

Samouelle's Register records two specimens as received from Hardwicke, and both are extant. There appear to be no further specimens in Hope's collection. The species was unknown to Mulsant (1850) and Crotch (1874: 145) gave a brief and partially inaccurate redescription.

Dissection of conspecific specimens in BMNH shows that Mulsant's species and Crotch's three species, represented by the lectotype in UCCC (Gordon 1987) and by apparently unique syntypes in BMNH respectively, are all colour forms of a single species, which therefore fall in synonymy with *C. vulnerata* (Hope).

***Scymnus waterhousii* Mulsant, 1850: 994 ' (collect. Westwood)'**

Rhyzobius waterhousei* (Mulsant) **comb. n.*

LECTOTYPE (here designated), '108 [written on mounting card]/ VDL Lewis [i.e. Van Diemen's Land]/ 54./ W/ 54 - waterhousii [Mulsant's hand, except final i added by Westwood]'.

This species has not been recognised since its original description, probably because Mulsant failed to indicate from whence it came. However, the locality datum on the specimen shows that it originated from Tasmania. It belongs in the group of small species resembling *R. pulcher* Blackburn and *R. alphabeticus* Lea.

According to Smith (1986), Westwood received a collection of Tasmanian insects from R. Lewis in 1837.

Brachyacantha westwoodii Mulsant, 1850: 520 'le Mexique (collect. Westwood)'

Brachiacantha westwoodii Mulsant

HOLOTYPE male, '25./ 175 [white disc]/ [blank green square, without data]/ W/ Mex Coffin/ 25 Brachyacantha westwoodii [Mulsant's hand]/ TYPE Col: 1931'.

The determination label on the holotype, originally from Mulsant's list of Westwood's material, was of particular interest. On the reverse side were the letters 'trictus' in Mulsant's handwriting, crossed out by Westwood. These must have belonged to the name '*Scymnus constrictus*', and thus they indicate that *Scymnus constrictus* was species number 49 on Mulsant's list of Westwood's material. This discovery was important because the original labels relating to *S. constrictus* have been lost (see above).

Five specimens in BMNH from Mexico City, collected by Hinton and Usinger, have been identified by us as *B. westwoodii*, after comparison with the holotype. However, it is obvious that Gorham (1894: 185) misinterpreted this species. The specimens (apparently representing three different species) seen by Gorham and now in the BMNH are all much smaller than the true *B. westwoodii*. Those from the Mexican localities of Atoyac, Jalapa and Toxpan are *B. bipartita* Mulsant *stat. rev.* Examination of Chevrolat's syntype of *B. bipartita* is UCCC showed that this name should be resurrected from synonymy with *B. westwoodii*. Gorham had erroneously synonymised these two names, having examined the syntype of *B. bipartita* in UCCC, but he did not mention having examined the holotype of *B. westwoodii* from Westwood's collection.

Scymnus xanthaspis Mulsant, 1850: 952 'la Floride (Doubleday, Westwood)'

Diomus xanthaspis (Mulsant)

LECTOTYPE (designated by Gordon 1976: 352), 'E. Florida Doubleday/ W/ 46* *Scymnus xanthaspis* Mulsant p. 952 [Westwood's hand]/ LECTOTYPE *Scymnus xanthaspis* Muls Gordon 1972/ TYPE Col: 1937'.

The labels on this specimen deserve further comment. The locality label and blue kite-shaped W label are typical of Westwood's material, but Mulsant's yellow numbered label is missing. The thin paper strip bearing the determination in Westwood's handwriting is otherwise typical of Mulsant's other labels on Westwood's material. For some unknown reason, Westwood had to rewrite

the determination. The mark following the number 46 appears to represent an asterisk, whereas Mulsant used 'bis' to insert a name in Hope's intact list of species.

This species was redescribed by Gordon (1976).

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