Lee et al, 1956

THE AUSTRALASIAN DIPTERA OF J. R. MALLOCH.*

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(With One Portrait, Plate xi.)

[Read 30th November, 1955.]

An Index to the Diptera from the Australasian Region dealt with by J. R. Malloch, comprising lists of families, groups, genera and species with bibliographical references and present location of the type and other named material and a bibliography of those papers by J. R. Malloch which concern the Australasian Region.

1. Introduction and Acknowledgements.

The present task was conceived by one of us (D.J.L.) because of the need for stabilization of the important type collections housed in the School of Public Health and Tropical Medicine. It was inevitable that the exigencies of the past war should have occasioned some degree of neglect in these collections, and with changes of staff in a small department it became necessary to establish the *status quo* of the collections under its care.

This could have been done as a purely domestic matter, but, because of the outstanding significance and the great extent of the contribution made by J. R. Malloch to our knowledge of the Diptera of Australia and the Pacific, it was decided to extend this project to the point of providing a basic document of reference to the work of J. R. Malloch on Australasian Diptera.

For the attainment of our objectives Miss M. Crust was appointed to devote her attention to producing a bibliography of pertinent literature and lists of species and higher groupings, dealt with by J. R. Malloch. This formed the basis of the present work and she was then able to give her attention to the rearrangement and listing of all the material in the collection of this School described or otherwise dealt with by Malloch. This was no mean task and constituted an arduous part of the total labour involved and was almost exclusively accomplished by Miss Crust.

It was at this stage that the co-operation of other organizations was sought. We felt that having set our own house in order we could legitimately impose on the time of entomologists in institutions elsewhere in Australia and overseas to find the extent to which Malloch type material was represented in these places. In all cases co-operation was most readily forthcoming and due acknowledgement is made below. In this way a body of information was gradually built up on the disposition of Malloch type material, leaving towards the end a residue of 200 species, the whereabouts of whose types became problematical. At this stage the literature had to be checked again and approaches made to a number of other institutions which were reputed to hold small numbers of the types in question, until gradually the number of missing types was reduced to little more than 50.

These latter stages have involved the entry, in the previously prepared master list, of all information coming in from outside sources. The reliability of the master list has been cross-checked by the submission of this outside information, and since less

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than a dozen species have been added to the list, this leads us to hope that it has attained a reasonably high order of accuracy.

It is often true that the complexities of a problem remain undisclosed until it is partially solved. In the present case we were aware of difficulties in working with Malloch material, but we had no conception of the very considerable difficulties inherent in the acquisition of Malloch's private collection by the United States National Museum. Indeed, our lists would never have approached completion, except for our own domestic problem, were we not able to have indirect access to this important collection. This indirect access has been provided by Curtis W. Sabrosky, of the staff of the United States Department of Agriculture, Agricultural Research Service, who has been in every sense a collaborator in the present task. His contribution to the final completion of these lists has been a very considerable one which has been all the more valuable because of his wide knowledge and critical approach to the many little problems involved. We are indeed most deeply indebted to the ever-willing assistance of Mr. Sabrosky. Other members of the same service who have also assisted in their particular fields are Dr. Alan Stone and Dr. Willis W. Wirth.

Outside Australia the next most important collection has been that of the British Museum (Natural History) and we are indebted to Mr. H. Oldroyd for listing and checking the fairly considerable holding of Malloch type material there. Dr. E. H. Bryan, Jr., of the Bernice P. Bishop Museum, provided us with all details of relevant material lodged there in a form which considerably lightened our own work.

Elsewhere outside Australia, Dr. F. Peus, of the Zoologisches Museum, Berlin, and Dr. H. Sachtleben, of the Deutsches Entomologisches Institut, have promptly supplied us with required information. We are also indebted to the Directors of the Musée Royale d'Histoire Naturelle de Belgique, the Rijksmuseum van Natuurlijke Historie, Leiden, the Hungarian Museum of Natural History, the Vienna Natural History Museum and the Zoological Museum, Hamburg, for information concerning the small holdings of Malloch material in these places.

Of most importance in Australia, apart from this School, have been the collections of the Division of Entomology, C.S.I.R.O., and of the Australian Museum. Dr. S. J. Paramonov and Mr. T. G. Campbell, of the former institution, have been most co-operative at all times, and for the latter Mr. A. Musgrave has been most helpful.

Mr. H. Womersley, of the South Australian Museum, and Mr. C. E. Chadwick and Mr. E. H. Zeck, of the New South Wales Department of Agriculture, have provided us with information concerning their respective institutions.

In New Zealand we are indebted to both Dr. D. Miller and Mr. A. W. Parrott, of the Cawthron Institute, for information concerning types held in both the Cawthron and the Canterbury Museum.

For details concerning Malloch's career we are indebted to Dr. W. V. King, Dr. W. L. McAtee and officers of the United States Fish and Wildlife Service. To Malloch himself we are grateful for the portrait reproduced herein.

Finally the unenviable job of typing this entire document twice fell to the lot of Miss C. Mullen, of this School, and we are most grateful for the care and patience she devoted to it.

It is appropriate, since Malloch published so many of his papers (45 papers totalling over 850 pages) in the PROCEEDINGS OF THE LINNEAN SOCIETY OF NEW SOUTH WALES, that this catalogue should be presented in this journal.

(D.J.L.)

2. J. R. MALLOCH.

John Russell Malloch is now living in retirement in Florida, having pursued a very active career in systematic entomology over a long period of years.

His birthplace was Milton of Campsie, Stirlingshire, Scotland, and the date, 16th November, 1875.

His early interest in entomology is evidenced by a number of papers appearing in journals such as the *Scottish Naturalist* following his graduation as Bachelor of Arts of the University of Glasgow in 1897.

In 1909 Malloch went to the U.S.A. and for a few years he travelled and worked in various jobs, including pattern designing in a silk works in New Jersey.

In 1912-13 he obtained a position as scientific assistant in the U.S. Bureau of Entomology; later he worked on insects at the Philadelphia Academy of Natural Science until he joined the State Natural History Survey of Illinois, where he remained until 1921.

His work with the U.S. Biological Survey (now Fish and Wildlife Service, Department of the Interior) commenced in June, 1921, when he was appointed Technical Assistant. Two months later he became Assistant Biologist, and in 1924 Associate Biologist, and was later promoted to Biologist in 1929, a position he held until the end of 1934, when he retired. He rejoined this department for a little over two and a half years in 1936-1938, when his official activities ceased, although his research activities continued for at least the next four years.

Malloch's early interests in entomology appear to have been in lepidopterous life histories, although his first descriptions of new species were of Hymenoptera. He also published on Hemiptera, but his long-continued interest has been in the Diptera, a group in which his studies embraced many families.

His work in the State Natural History Survey of Illinois culminated in the appearance of his important general work, "A Preliminary Classification of Diptera, Exclusive of Pupipara, based upon Larval and Pupal Characters, with Keys to Imagines in Certain Families", appearing in the *Bulletin of the Illinois State Laboratory of Natural History*, Vol. XII, article III, 1917, pp. 161-407.

From this period on his work has been exclusively on Diptera, but was far from confined to the fauna of the American continent. Important contributions were made to our knowledge of certain families on a global basis, but regionally his work extended to South America, the Pacific, Australasia, Malaya and Africa.

He has been, unquestionably, one of the most prolific Dipterists and it would now be difficult to assess the total number of species of which he is the author.

In the Australasian region we know that he described well over 1000 new species and reviewed more than twice as many more. This has been done in approximately 140 papers covering a range of 37 families of Diptera varying from the Bibionidae to the Tachinidae. In this region he has made important contributions to our knowledge of the Muscidae, Calliphoridae and Tachinidae, but even more important are his studies on the various families of Acalyptrate Muscoidea.

Most of Malloch's contributions to Australasian entomology came within the period 1920-1940, and in many of the groups he dealt with he was the sole worker.

His work is frequently basic and in many groups remains the latest authoritative work in Australian literature. Indeed, it is only in very recent years that there has been any attempt, by younger workers, to follow on with more modern revisions of a few of the many groups dealt with by Malloch.

There is no doubt that revisions are needed, but the basic framework of classification and species has been provided for us, under the difficult conditions imposed by small collections being sent abroad for study. Our task is now to convert this structural framework into a fuller knowledge.

Had Malloch not co-operated so fully in studying our local Diptera we would probably still be facing the construction of this framework, and we are greatly indebted to him for the task he has performed on our behalf.

3. Key to Abbrevations and Notes on Interpretation.

(a) *Abbreviations.*

Type material of Diptera from the Australasian Region has been located in seventeen collections. These are referred to in the list of species under the following abbreviations:

SPHTM.—School of Public Health and Tropical Medicine, University of Sydney, Sydney, New South Wales, Australia.

Aust. M.—The Australian Museum, College Street, Sydney, New South Wales, Australia.

NSW Dept. Agr.—The New South Wales Department of Agriculture, Farrer Place, Sydney, New South Wales, Australia.
CSIRO.—Division of Entomology, Commonwealth Scientific and Industrial Research Organization, Australian Capital Territory, Australia.
S.A. Mus.—The South Australian Museum, Adelaide, South Australia, Australia.
Cawthron.—The Cawthron Institute, Nelson, New Zealand.
C'bury M.—The Canterbury Museum, Christchurch, New Zealand.
Bishop M.—The Bernice P. Bishop Museum, Honolulu, Hawaii.
USNM.—The United States National Museum, Washington, D.C., United States of America.
BM(NH).—The British Museum (Natural History), Cromwell Road, London, England.
Bruxelles.—Musée Royale d'Histoire Naturelle de Belgique, Rue Vautier 31, Bruxelles, Belgium.
Leiden.—Rijksmuseum van Natuurlijke Historie, Leiden, Holland.
Amsterdam.—Zoologisch Museum, Zeeburgerdijk 21, Amsterdam, Holland.
Budapest.—Orszagos Termeszettudomanyi Muzeum, Baross Utca 13, Budapest VIII, Hungaria.
DEI.—Deutsches Entomologisches Institut, Berlin—Friedrichshagen, Waldostrasse I, Germany.
Hamburg.—Zoologisches Staatinstitut und Zoologisches Museum, Hamburg 13, Bornplatz 5, Germany.
Vienna.—Naturhistoriches Museum in Wien, Wien, 1, Burgring 7, Austria.

Throughout the various lists literature references have been cited with a key number (M1–M135) followed by page references in brackets. The key numbers refer to the individual papers, serially listed, in the bibliography. In a few cases a serial number, e.g. M110 (*a*), covers more than one individual paper which appeared consecutively in the one publication. An attempt has been made to keep the papers in strict chronological order, but this has occasionally broken down within a particular year when publication in more than one journal has been involved. This means that in a few cases the reference with the lowest key number may not be the first reference to the species in question.

(*b*) *Notes on Interpretation.*

(i) *Scope of the Species List.*

We have endeavoured to list every species dealt with by Malloch from the Australasian Region which, for the convenience of this publication we interpret as Australia, Timor, islands northward to the Moluccas, and all islands of the Pacific eastward and southward from New Guinea to Hawaii. An occasional species from just outside this area has been included, but all strictly Oriental species have been excluded.

This species list is built up from the papers listed in the bibliography and from the material handled by Malloch. Occasionally no reference is given for a species although material identified by Malloch is listed. This simply means that the species in question has been identified by Malloch but not dealt with in the literature. All references by Malloch to Australasian species that we have discovered have been entered with the one important exception of his Catalogue of Australian Tachinidae (M47). This being in itself a full catalogue, we considered it would be redundant to republish the information which is already in its most useful form. The occasional references to this Catalogue have occurred because Malloch has identified certain of the species listed without discussing them in any subsequent paper.

(ii) *Holotypes.*

Malloch infrequently used the term "holotype", the majority of his citations and labels being simply "type". As his intentions are clear we have consistently used "holotype" in the lists for the more ready differentiation of other kinds of types.

Although the majority of relevant types have been located there does remain a residue for which information is lacking. It is difficult to be positive that a missing

type is no longer in existence. For instance, types supposed to be in Hamburg and destroyed by bombing during World War II were eventually found in Malloch's collection. However, evidence of insect damage in Malloch's collection was obvious when handed over to the United States National Museum, and some types may have been destroyed. Also one of us (D.J.L.) did see Malloch type labels on empty pins in the School of Public Health and Tropical Medicine Collection in 1946, but these labels can no longer be located. Hence some types are known to have been lost in this way, but which ones remains in doubt. Further, there are records of certain types being received in this school in 1934 and the records include annotations that they were to go, or did go, to the Macleay Museum, University of Sydney, but no trace of these can now be found. Finally, there are a number of types of Calliphoridae, approximately ten, for which there is presumptive evidence that they were returned to Australia but which cannot be traced, nor is there any known record concerning them.

Whenever no holotype has been located, if there is any evidence as to what may have happened to it this is indicated in a footnote.

(iii) *Allotypes.*

Although cited in his descriptions allotypes have not been regarded as of great importance by Malloch, and he has frequently labelled them "paratypes", although it is clear from his descriptions that a particular "paratype" specimen is the one referred to as allotype. Some such cases have been noted in the species list but there are undoubtedly others which have not been detected.

(iv) *Paratypes.*

In so far as possible specimens listed as paratypes have been checked with the original descriptions to make sure they were available to the author at the time the species in question was described. This procedure has been followed in the main by the authors but not by our other collaborators. Since Malloch has attached paratype labels to specimens seen after publication of a species, a reviewer should take precautions to assess the authenticity of paratype material before using it as a basis of redescription. For example, *Pseudoleucopis flavitarsis* was published in 1925, only the type being listed. In his collection was found a specimen labelled "paratype" but only collected in 1926, and referred to in the literature in 1930. Many other such cases of liberality with "paratypes" have been detected, hence our note of caution regarding the interpretation of the status of specimens labelled "paratype", since those designated subsequent to time of publication, and not examined during the description of the species cannot be valid paratypes.

(v) *Details of Labels.*

There are many cases of discrepancy between the collection data as published and that appearing on the actual label. Wherever such instances have been detected they have been noted, but there will be more and reviewers should keep this in mind in case the relevant data are of significance. At times, too, there is a discrepancy between the name of the species as published and that appearing on the type label. The published name must stand, of course, but where such discrepancies have been detected they have been noted.

(vi) *Unpublished Names.*

Quite a number of types have been found, both in Australia and in the United States National Museum, the names of which do not appear to have been published. In the main we have been convinced that most of these are unpublished, although it is still possible that our search of the literature has been incomplete despite our endeavours to the contrary.

In those cases where the unpublished name is confused with a description under some other name we have included the *nomen nudum* in our list. Otherwise unpublished names have been suppressed, in order to avoid adding such *nomina nuda* to the literature.

(vii) *Location of Type Material.*

Malloch did not consistently indicate the sources of his material and where the types were to be lodged. This has led, in the past, to a great deal of confusion as to the whereabouts of his types. Furthermore, even when the types are stated to be in a certain institution it has not always meant that they did in fact reach the institution named. Added to this, Malloch's own collection has been inaccessible for a number of years, and even the collection housed in this School was not organized in such a way that a student could be certain of finding the material he wished to examine. All this meant that only limited reference could be made to the material on which Malloch based his extensive literature.

Most of the material examined by Malloch has now been located and its location is revealed in the present lists.

Since Malloch's correspondents were often individuals rather than institutions it was inevitable that some types did not end up in the collections in which they are stated to be lodged. Indeed this is a common occurrence. Further, some of the institutions no longer maintain collections and have transferred them elsewhere. In particular the important collection of the late Dr. Eustace Ferguson, once held by the New South Wales Department of Health, is now housed in the School of Public Health and Tropical Medicine, University of Sydney. Certain private collections have also been dissipated in various ways, but the major changes in type locations have been due to the changes in employment of some of Malloch's correspondents.

It would be more than a major task at this stage to try to reestablish types in conformity with the statements in the literature. Since the present dispersion of the collections in question no longer conforms with the literature, such a procedure would never be completely successful. This is the basis of the significance of publication of the lists of present type locations, since there is every reason to believe that stability has now been realized.

It is also obvious that the second World War did impede the return distribution of type material by Malloch. Many types were discovered in Malloch's private collection which became the property of the United States National Museum in 1949. Among this material it was obvious that quite a considerable number of the types should have been returned to a variety of museums and through the generosity of the U.S. National Museum these are being returned to the country of origin whenever this intention has been expressed in the literature.

(viii) *Synonymy.*

Since we have listed all specific names used by Malloch any synonymy for which he is responsible will be revealed when the species references are consulted. Other later synonymy for which authors other than Malloch are responsible has been ignored because we were only concerned with Malloch's literature as such and because it would be impossible for us to cover completely the subsequent literature, for all the groups dealt with by Malloch, in order to include all recent changes in specific status.

(ix) *Genera.*

Species are listed in the genera in which Malloch included them. Changes in generic interpretation have taken place and where Malloch has been responsible for such changes, or where he has accepted changes proposed by other authors, these are revealed by the species being listed under each generic name. The occurrence of brackets around Malloch's name as author will provide a ready indication that such changes have occurred.

(x) *Family Names.*

The family names used are those employed by Malloch. Changes in family concepts have also occurred and the entry of two or more family names after a generic name is an indication of varying family concepts. Certain family names, e.g. Ortalidae, were used by Malloch over a long period but his later papers reveal the adoption of an alternative name, as in the case cited, of Otitidae. In such cases we have tried to be consistent in using the earlier name as well as the later one in references subsequent to the change.

(xi) *Spelling.*

Although we are aware that the spelling of some specific names used by Malloch is not correct, and in some cases has been corrected in recent literature, we have tried to be consistent in quoting Malloch accurately. Any variations from the spelling used by Malloch which may be detected are not corrections on our part but will be simply typographical errors.

4. List of Families with Cross References to the Bibliography.

AGROMYZIDAE: M12 (622); M18 (335-338); M24 (88-93); M25 (335-339); M31 (546-547); M35 (7-8); M38 (421-428); M86 (213-216); M104 (1-2); M110 (340-342); M111 (18-19); M130 (266).

ANTHOMYZIDAE: M102 (113-114); M115 (260-261).

ASILIDAE: M43 (296-300); M46 (607-611); M56 (408-410).

ASTEIIDAE: M18 (338); M38 (445-446); M40 (23-26); M71 (231-233); M80 (321-322); M93 (115-116); M112 (190-192); M115 (259-260).

BIBIONIDAE: M46 (602-606).

BOMBYLIIDAE: M16 (205); M46 (606-607); M81 (138-140).

BORBORIDAE (SPHAEROCERIDAE): M1 (236-237); M24 (85-86); M44 (325-326); M102 (260-262); M111 (23-24); M116 (323-325).

CALLIPHORIDAE: M20 (638-640); M32 (498); M33 (205); M36 (299-335); M44 (328-329); M45 (360); M46 (612-613); M55 (283); M62 (269-272); M64 (256-257); M69 (436-447); M72 (313-324); M73 (233-237); M75 (481-483); M84 (64-68); M92 (13-16); M107 (12-22); M110 (365); M114 (21-23); M119 (186 and 190).

CHLOROPIDAE: M12 (619-621); M18 (329-333); M19 (354-359); M24 (94-97); M25 (335-339); M31 (546); M38 (428-445); M43 (300-303); M74 (243-250); M78 (60-76); M83 (404-421); M96 (216-217); M111 (27-30); M114 (23-26); M116 (334-356); M128 (261-288); M134 (41-64).

CLUSIOIDIDAE (CLUSIIDAE): M30 (47-48); M63 (99); M66 (199-201); M69 (434-435); M96 (215); M135 (209).

COELOPIDAE: M101 (345-350).

DIOPSIDAE: M117 (437-438).

DROSOPHILIDAE: M12 (611-619); M19 (348-354); M24 (87-88); M25 (334-335); M35 (1-7); M40 (23-26); M45 (354-358); M76 (331-332); M96 (217-223); M109 (90); M106 (267-311); M111 (19-23); M112 (192-196).

EMPIDIDAE: M69 (449-450); M83 (424-428); M97 (458).

EPHYDRIDAE: M18 (333-335); M24 (86-87); M25 (324-332); M31 (545-546); M34 (5-17); M45 (353-354); M71 (245); M105 (1); M106 (312-323); M111 (3-16); M112 (196-200).

GEOMYZIDAE: M24 (93-94).

HELCOMYZIDAE: M103 (325-327).

HELOMYZIDAE: M7 (227); M31 (551-552); M39 (83-100); M72 (333-344); M80 (294-295); M103 (183-184 and 200-202).

LONCHAEIDAE: M43 (304-307); M74 (239-243).

MICROPEZIDAE: M110 (342-348).

MILICHIIDAE: M78 (76-78); M106 (325-329); M111 (3).

MUSCIDAE: M4 (428-430); M5 (237-239); M6 (414-420); M8 (272-280); M9 (135-143); M10 (351-359); M11 (574); M12 (601-611); M13 (666-674); M14 (184-193); M15 (513-514); M17 (138-146); M21 (415); M22 (322-338); M23 (35-46); M25 (339-340); M26 (139-142); M27 (329-339); M28 (115); M29 (508); M30 (48-49); M31 (553-554); M44 (326-328); M49 (297 and 333-334)[3]; M50 (468); M52 (80-81); M55 (283); M58 (151-175); M60 (390-408); M62 (262-264); M65 (326-333); M72 (289-306); M83 (379-383); M89 (402 and 506); M95 (193-203); M107 (7-9); M108 (77-78); M119 (254-256).

MYCETOPHILIDAE: M46 (599-602); M54 (107).

NEOTTIOPHILIDAE: M31 (552-553); M35 (16); M69 (435-436); M86 (217); M109 (94-95).

NERIIDAE: M110 (343).

OCHTHIPHILIDAE: M70 (488-491); M86 (216-217); M130 (266).

OPOMYZIDAE: M71 (235-242).

ORTALIDAE (OTITIDAE): M24 (85); M31 (547-548); M45 (343-353); M46 (611-612); M57 (505-516); M63 (99-100); M69 (429-434); M70 (491-492); M71 (243-244); M73 (215-231); M82 (1-28); M96 (205-215); M98 (36); M103 (262); M121 (97-154); M129 (66-88); M131 (19-20); M135 (205-208).

PHORIDAE: M2 (433, 501, 514); M25 (332-334); M109 (95); M110 (329-340); M111 (30-31).

PHYTALMIIDAE: M122 (169-180); M129 (88-98).

PIOPHILIDAE: M25 (315-316); M35 (8); M43 (309); M74 (251); M80 (292-293); M96 (215); M103 (246).

PSYCHODIDAE: M3 (265).

PYRGOTIDAE: M53 (1-31); M120 (51-53).

RHAGIONIDAE: M79 (273-276); M88 (112 and 116).

SAPROMYZIDAE: M24 (81-85); M25 (316-324); M30 (31-47); M31 (548-551); M34 (20-26); M35 (8-15); M38 (399-421); M41 (102); M42 (162-163); M44 (319-322); M45 (355-360); M59 (37, 58, 65, 68, 80); M61 (409-414); M63 (97-98); M65 (322); M66 (201-213); M69 (434); M71 (244); M91 (3-12); M98 (34-36); M109 (87-90); M111 (24-27); M112 (180-189); M125 (447-449); M132 (20-22); M133 (132-145).

SCIOMYZIDAE: M7 (228); M24 (80-81); M44 (322-325); M48 (151-178); M72 (343-344); M113 (95-96); M130 (266).

SEPSIDAE: M25 (311-315); M43 (307-309); M46 (611-612).

STRATIOMYIIDAE: M45 (360-366).

SYRPHIDAE: M1 (233-236); M7 (227); M109 (87).

TACHINIDAE: M37 (336-353); M44 (329-335); M46 (614-617); M47 (651-662); M54 (107-117); M55 (283-343); M67 (92-135); M68 (303-353); M72 (307-311 and 325-331); M77 (130); M78 (78); M80 (295-298); M83 (385-388); M85 (127-132); M87 (273-274); M97 (431-454); M99 (74-79); M100 (135-139); M104 (2-8); M107 (24); M108 (74-76); M110 (348-365); M114 (10-20); M119 (162-252); M134 (64).

TETHINIDAE: M109 (91-94); M111 (16-18).

THEREVIDAE: M90 (241-242).

TRYPETIDAE: M81 (253-266); M83 (391-404); M94 (145-147); M103 (274); M112 (200); M118 (111-116); M123 (331-334); M124 (409-465); M126 (228-278); M127 (239-242); M135 (202).

caniventris Bez. (*Trypaneoides*) : M66(203) ..				5 Malloch USNM
capitata (Wied.) (*Ceratitis*) : M124(451)				
carbonaria Hutt. (*Lauxania*) : M34(26) ; M71(231)				
carbonarius Hendel (*Dacus*) : M118(113)				
carinata (Stein) (*Rhyncomydaea* or *Hardyia*) : M12(604) ; M31(554)				1 Malloch Aust. M ; 5 Malloch USNM
carinata Mall. (*Tricimba*) : M19(356–357) ; M38(444) ; M83(409)	SPHTM			
carinifacies Mall. (*Tricimba*) : M38(443)	CSIRO		1 USNM	
casei (Linné) (*Piophila*) : M25(316) ; M96(215) ; M103(246)				1 Malloch SPHTM
cassiniae Mall. (*Tephritis*) : M83(395–396)	C'bury M		1 USNM	4 F. A. Perkins BM (NH)
castanea (Hutt.) (*Neolimnia*) : M48(165)				
castaneus Hutt. (*Anabarrhynchus*) : M90(241)				
castigata Mall. (*Helina*) : M23(41, 44)	SPHTM		2 USNM	
catharinae de Meij. (*Cleitamia*) : M121(107)				
caudatus Fabr. (*Dacus*) : M81(256)				
cavifrons Mall. (*Cairnsimyia*) : M80(294–295) ..	DEI		1 USNM	
celyphoides (Walk.) (*Mesoctenia*) : M121(123)				
centralis Mall. (*Adrama*) : M126(247–249) ..	BM (NH)	BM (NH)	1 BM (NH)	1 F. van Emden BM (NH)
centralis Mall. (*Calliphora*) : M36(311) ; M46(613) ..	SPHTM			2 Malloch, 5 Taylor SPHTM ; 4 G. H. Hardy BM (NH)
centralis Mall. (*Clusiosoma*) : M124(426)	SPHTM		2 USNM (1 fragmentary)	
centralis Mall. (*Dichaetomyia*) : M60(404) ..	Amsterdam			
centralis Mall. (*Plethochaetigera*) : M119(195–196)				
centralis Mall. (*Thyridula*) : M24(96) ; M38(441) ; M128(274–275)	SPHTM		1 ? CSIRO	1 Malloch Sabrosky Coll.
centralis Mall. (*Trypanea*) : M83(402)	C'bury M		1 USNM	
ceres Curran (*Steganopsis*) : M138(133)				
certima Curran (*Demoticus*) : M47(653)				6 Malloch USNM
cervicornis Gerst. (*Phytalmia*) : M122(171–172) ..				1 Malloch SPHTM ; 1 Malloch Aust. M
chalcogaster Wied. (*Ophyra*) : M13(666) ; M58(170) ; M65(333) ; M95(196)				2 Malloch SPHTM ; 1 Malloch USNM
chalcura Bez. (*Sarcophaga*) : M62(269)				
chalybea (Dol.) (*Pseudepicausta*) : M121(118) ; M129(72)				2 Malloch SPHTM ; 1 Malloch USNM
chathamensis Mall. (*Allophylopsis*) : M39(94–95)	C'bury M			
cheesmanae Mall. (*Chaetoscatella*) : M112(199–200)	BM (NH)		9 BM (NH)	3 Malloch USNM
cheesmanae Mall. (*Cleitamia*) : M121(110–111) ..	BM (NH)			
cheesmanae Mall. (*Homoneura*) : M132(21–22) ..	BM (NH)			
cheesmanae Mall. (*Limnophora*) : M65(331) ..	BM (NH)		5 BM (NH)	
chinensis (Fabr.) (*Ommatius*) : M56(408)				1 Malloch USNM
choreoides Bez. (*Lonchaea*) : M43(306)				
**chrysame* (Walk.) (*Amenia*) : M67(101) ; M99(75–76)				2 Paramonov SPHTM; 2 Malloch USNM
chryseps Mall. (*Sturmia*) : M110(356–357) ..	BM (NH)	BM (NH)	1 BM (NH)	
chrysis Mall. (*Hyalomyia*) : M67(95)	SPHTM			
chrysothrix Bez. (*Dexopollenia*) : M36(324)				
chrysotoxus Hendel (*Dacus*) : M81(256)				
ciliata Hendel (*Desmometopa*) : M18(336) ; M106(327)				
†*ciliata* Mall. (*Lispocephala*) : M60(393)	Amsterdam			1 Malloch USNM
cilicrura (Rond.) (*Hylemyia*) : M17(139) ; M72(291)				1 Malloch SPHTM
‡*cilifera* Mall. (*Apilia*) : M68(345–346)	CSIRO		1 ? USNM	
cilipes Macq. (*Masicera*) : M110(358)				
cincta Towns. (*Protomiltogramma*) : M36(335) ; M69(445)				1 Malloch SPHTM ; 1 Malloch USNM
cinctus (Guér.) (*Scholastes*) : M73(222) ; M98(36) ; M121(128) ; M129(73)				4 Malloch SPHTM
cinerea Mall. (*Apalpostoma*) : M67(134–135) ..	SPHTM			
cinerea Mall. (*Chaetometopia*) : M69(443–444) ..	CSIRO			
cingulata Mall. (*Formosia*) : M67(105)	CSIRO			
cingulata (Macq.) (*Zosteromyia*) : M67(111) ..				2 Malloch SPHTM ; 2 Malloch USNM
cingulatus (Fabr.) (*Eristalis*) : M7(227)				
cingulatus (Fabr.) (*Helophilus*) : M7(227)				
cingulatus (Fabr.) (*Mallota*) : M7(227)				
cingulatus (Fabr.) (*Pilinasica*) : M7(227)				
cingulatus Fabr. (*Syrphus*) : M7(227)				
circumsetosa de Meij. (*Apiochaeta*) : M110(334)				
cirrhura Bez. (*Sarcophaga*) : M75(481)				
citricola Bez. (*Lonchaea*) : M43(307)				
claripennis Mall. (*Dichaetomyia*) : M60(407) ..	Amsterdam			
claripennis Mall. (*Fenwickia*) : M72(337)	C'bury M		2 C'bury M ; 4 USNM	1 F. van Emden BM (NH)
claripennis Mall. (*Limnophora*) : M65(332) ..	BM (NH)		8 BM (NH)	
claripennis Mall. (*Macquartia*) : M97(435–436) ; M119(221–222)	C'bury M			
claripennis Mall. (*Prochaetops*) : M91(10)	Bishop M			
clarki Mall. (*Calliphora*) : M36(316)				
clarki (Hutt.) (*Neotachina*) : M119(243–244)				
clarkii Hutt. (*Tachina*) : M97(434) ; M119(243–244)				
clathrata Nowicki (*Cerosomyia*) : M119(197)				
cleitamina Edw. (*Ortalaptera*) : M124(454)				
clelandi Ferg. (*Spaniopsis*) : M79(274)				4 Malloch USNM

* See also *Amenia parva*.

† The specimen in USNM has the same data as given for one of the paratypes and may possibly have been intended as such.

‡ The ♂ from Cairns District, noted in the original publication, is labelled "paratype ?" by Malloch.

filipalpis Macq. (*Actina*) : M45(364)				1 Malloch USNM
flava (Edw.) (*Sophira*) : M126(257) ; M124(430–431)				
flavescens Hend. (*Acropygota*) : M53(15)				
flavibasis Mall. (*Heteria*) : M72(330)	USNM			1 Malloch BM (NH) ;
flavicans Mall. (*Myiospila*) : M5(237–238) ..	BM (NH)			2 Malloch USNM
flaviceaudus Mall. (*Ommatius*) : M56(409–410) ..	USNM	USNM	4 USNM	2 Malloch SPHTM ;
flaviceps Hend. (*Asyntona*) : M121(122) ; M129(76)				1 Malloch USNM ;
				1 Malloch, 2 Paramonov SPHTM ; 1
**flaviceps* (Macq.) (*Chlorotachina*) : M37(353) ; M55(324)				Malloch Aust. M ; 8 Malloch USNM
flaviceps Mall. (*Incurviseta*) : M38(405)	CSIRO			
flaviceps Mall. (*Themarohystrix*) : M124(422–423)	SPHTM		1 USNM	1 Malloch SPHTM
flacicollis Ferg. (*Graptomyza*) : M109(87)				
flavicornis Mall. (*Anatropomyia*) : M67(127) ..	SPHTM			
flavicornis Mall. (*Apactoneura*) : M73(223–224) ..	Bishop M		1 BM (NH)	
flavicornis Mall. (*Batrachomyia*) : M25(336) ; M128(264)	SPHTM			
flavicornis Mall. (*Fergusonina*) : M24(92) ; M86(215)	CSIRO			1 Malloch SPHTM
flavicornis Mall. (*Lucilia*) : M36(322)	CSIRO (abdomen damaged)			
flavicornis Mall. (*Semisuturia*) : M37(341) ..	USNM			
flavifacies Mall. (*Bunostoma*) : M96(219–220) ..	Bishop M	Bishop M	4 Bishop M ; 3 USNM	
flavifrons Tonn. & Mall. (*Achrostichalia*) : M39(87) ; M103(199–202)	Cawthron			1 Malloch SPHTM ;
flavifrons (Macq.) (*Cylindromyia*) : M53(291) ; M68(315)				4 Malloch USNM
flavifrons Mall. (*Doddiana*) : M68(342) ; M100(137)	SPHTM			1 Malloch SPHTM
flavifrons Aldr. (*Microcalliphora*) : M36(326) ..				3 Malloch BM (NH)
†flavifrons (Tonn. & Mall.) (*Prosopantrum*) : M103(199–202)	USNM			
‡flavimana Mall. (*Adrama*) : M123(333)	SPHTM		1 USNM	1 Malloch USNM
flavimana Mall. (*Sapromyza*) : M30(42–43) ..				1 Malloch USNM
flavinceris Miller (*Hilara*) : M83(427)	CSIRO		2 USNM ; 1 CSIRO	
flavipalpis Mall. (*Incurviseta*) : M38(407)	SPHTM	USNM		
flavipalpis Mall. (*Paralauxania*) : M38(412) ..				1 Malloch SPHTM ;
flavipennis (Macq.) (*Amphibolosia*) : M68(310–311)				1 Malloch USNM
flavipennis Macq. (*Formosia*) : M37(350) ; M55(309)				2 Malloch USNM
flavipennis Macq. (*Lamprogaster*) : M45(349) ..				
flavipennis Mall. (*Paralauxania*) : M38(410–411) ..	CSIRO			
flavipes de Meij. (*Brea*) : M121(124)				
flavipes Mall. (*Caviceps*) : M19(356) ; M38(442) ; M128(275)	SPHTM			3 Malloch USNM
flavipes B. & B. (*Rutilia*) : M55(306) ; M67(109) ..				
flaviseta Mall. (*Conioscinella*) : M128(286–287) ..	SPHTM		4 SPHTM ; 4 USNM	
flaviseta Mall. (*Tricimba*) : M83(409–410) ..	C'bury M	USNM		
flavitarsis Tonn. & Mall. (*Clasiopa*) : M34(13) ..	C'bury M			2 Malloch USNM
flavitarsis Mall. (*Microtropeza*) : M55(288) ; M67(100)	Aust. M			Specimen M70(490)
flavitarsis Mall. (*Pseudoleucopis*) : M24(93) ; M70(490)	SPHTM			USNM
flavitarsis (Macq.) (*Pseudorichardia*) : M63(100) ; M73(222) ; M96(206)				
flaviventris Mall. (*Microtropeza*) : M67(101)	CSIRO			
flaviventris Mall. (*Spilogona*) : M83(379–380) ..	C'bury M	C'bury M	2 USNM	
flavoapicalis Mall. (*Oscinosoma*) : M83(411–412) ..	USNM		1 USNM	
flavocapitata Mall. (*Lioscinella*) : M134(55) ..	SPHTM		1 SPHTM	2 Malloch USNM
flavocentralis Watt (*Agromyza*) : M38(427) ..				
flavodorsalis Mall. (*Sapromyza*) : M38(418) ..	CSIRO	USNM		
flavofemorata Mall. (*Homoneura*) : M38(420–421) ..	CSIRO	USNM		
flavofemorata Mall. (*Medinella*) : M119(236) ..	C'bury M		2 USNM	4 Malloch USNM
flavofusca Mall. (*Helina*) : M17(143) ; M23(42) ..	Aust. M			2 Malloch USNM
flavohalterata Mall. (*Leucophenga*) : M25(334–335) ..	USNM		1 USNM	
§flavohirta Mall. (*Dichaetomyia*) : M22(326) ..	USNM	USNM	3 USNM ; 2 SPHTM	1 Malloch SPHTM
flavohirta Mall. (*Drosophila*) : M19(354)	SPHTM		6 USNM ; 4 SPHTM	
flavohirta Mall. (*Lasiocalypter*) : M67(121) ..	SPHTM		4 USNM	
flavohirta Mall. (*Macquartia*) : M119(222)	C'bury M		2 USNM	
flavohumeralis Mall. (*Botanobia*) : M134(60) ..	CSIRO			
flavolateralis Mall. (*Limnophora*) : M58(167–168) ..	BM (NH)		7 BM (NH)	2 Malloch USNM
¶flavolateralis Mall. (*Lioscinella*) : M134(53) ..				
flavomarginata Mall. (*Neohelina*) : M22(329–330)	Aust. M		1 USNM	
flavoscutellata Mall. (*Hemilea*) : M126(270) ..	BM (NH)		4 BM (NH)	
flavoscutellata Mall. (*Stomosis*) : M24(88–89) ..	SPHTM			
flexinervis Stein (*Atherigona*) : M14(192–193)				
formosa Mall. (*Neothemara*) : M124(433) ; M126(255)	BM (NH)			4 Malloch USNM ;
formosa R.-D. (*Rutilia*) : M37(347–348) ; M44(332) ; M55(295)				1 Engel, 12 Paramonov SPHTM ; 2 Malloch Aust. M

* One specimen in SPHTM determined by Malloch is labelled *C. fulviceps* Macq.

† A reference to New Zealand specimens is to be found in a footnote by F. W. Edwards in Malloch, 1933, Diptera of Patagonia and South Chile (*Brit. Mus. (Nat. His.)*, Part VI, fasc. 4, p. 201.

‡ Although described in an Australian journal, this species is from North Borneo.

§ A ♀ paratype in SPHTM (Townsville, G. F. Hill) is not recorded as such by Malloch.

¶ Of the two specimens in USNM one is marked "Type" but they are from Sydney, 23:i:25. The specimens do not agree with the descriptions so are not the types.

irregularis Mall. (*Giraffomyia*): M129(97–98) ..	BM (NH)			
irregularis Mall. (*Psilopa*): M106(314–315) ..	Bishop M		1 BM (NH)	
irregularis Mall. (*Uclesiella*): M119(167–168) ..			1 USNM	1 Malloch USNM
irrorata Tonn. & Mall. (*Hyadina*): M34(16–17) ..	C'bury M		1 USNM	
irrorata Tonn. & Mall. (*Neolimnia*): M48(167–168)	Cawthron		1 USNM	
isolata Mall. (*Helina*): M60(398)	Amsterdam			
isolata Mall. (*Lispa*): M58(153)	BM (NH)		11 BM (NH)	
isolata Mall. (*Plethochaetigera*): M119(193–194) ..	C'bury M		1 USNM	
isolata Mall. (*Rivellia*): M70(492)	USNM	USNM		
jarvisi Tryon (*Rioxa*): M124(435)				
kaavae Mall. (*Rosenwaldia*): M112(195–196) ..	Bishop M			
kaiteriensis (Miller) (*Hilarempis*): M83(427)				2 Malloch USNM
kerteszi de Meij. (*Antineura*): M121(104) ..				1 Malloch SPHTM
kerteszi Hend. (*Cleitamoides*): M121(107)				
kirki Froggatt (*Dacus*): M81(256)				
knabi Parker (*Sarcophaga*): M75(482–483) ..				1 Malloch USNM
kochi de Meij. (*Laglaisia*): M121(112)				
kumaraensis Miller (*Macquartia*): M97(436); M97(454)				
kumaraensis (Miller) (*Peremptor*): M97(454) ..				8 Malloch USNM, in part originally determined as *vittata* Curran
lacteipennis Lamb (*Hecamede*): M111(12)				
lacteipennis (Loew) (*Milichiella*): M18(336); M78(77); M106(326); M111(3)				1 Malloch SPHTM
lacteipennis Mall. (*Phytomyza*): M110(342) ..	USNM			
lacteiventris Mall. (*Milichiella*): M78(77–78) ..	SPHTM			
lacuans Miller (*Chorisops*): M45(364)				
lacustris Mall. (*Dichaetomyia*): M60(404)	Amsterdam			
lacustris Tonn. & Mall. (*Parahyadina*): M34(17)	C'bury M		1 USNM	2 Wirth USNM
laeta Wied. (*Atherigona*): M58(158)				
laeta Walk. (*Lamprogaster*) (*Chromatomyia*): M121(145)				
laeta Guér. (*Lamprogaster*): M57(516)				4 Malloch USNM
lagarosia Hend. (*Pseudepicausta*): M121(118)				
lamellata Mall. (*Zealandotachina*): M119(232) ..	Cawthron			
lancifer Mall. (*Hyalomyia*): M72(309)	C'bury M	USNM		
lancifer Mall. (*Sapromyza*): M30(41–42)	SPHTM			
lantanae Froggatt (*Agromyza*): M38(426) ..				10 Malloch USNM
laquei (Hutt.) (*Allophylopsis*): M39(97)				
lasiophthalma Mall. (*Froggattimyia*): M104(6–7) ..	CSIRO			
lasiophthalma Mall. (*Pilimyia*): M68(329–330) ..	SPHTM			
lasiophthalma Mall. (*Tethina*): M111(17)	Bishop M	Bishop M	3 Bishop M; 3 USNM	
lata Mall. (*Actia*): M68(307)	SPHTM		1 USNM	
lateralis Mall. (*Procissio*): M119(204–205)				
lateralis Kert. (*Ptilona*): M124(464)				
latericia Hend. (*Pterogenia*): M57(513); M121(126)	SPHTM	USNM		
†*laticeps* Mall. (*Protomiltogramma*): M69(445–446)	Cawthron			
laticornis Mall. (*Avibrissina*): M119(179)	C'bury M		1 USNM	1 Malloch USNM
laticornis Mall. (*Neotachina*): M119(243)	Cawthron			
laticosta (Thoms.) (*Homoneura*): M59(80); M61(413); M133(141)				
latifascia (Walk.) (*Cleitamoides*): M121(107)				
latifrons Mall. (*Encompsomyia*): M36(326)				
latifrons Mall. (*Incurviseta*): M38(404–405)	SPHTM			
latifrons Mall. (*Platytachina*): M119(211–212) ..	USNM	USNM		
latifrons Mall. (*Scaptomyza*): M96(221–222); M112(194)	Bishop M		1 Bishop M; 2 USNM	
latifrons Mall. (*Zealandotachina*): M119(233) ..	Cawthron			
latimana Mall. (*Cryptochaetum*): M38(422) ..	SPHTM			
latimana Mall. (*Microtropeza*): M55(287); M67(100)	Aust. M			4 Paramonov SPHTM; 1 Malloch Aust. M; 4 Malloch USNM
‡*latimana* Mall. (*Spilogona*): M83(380)	USNM			
latipes Meig. (*Hypaxpistomyia*): M111(3)				
latipes Meig. (*Piophila*): M25(316); M80(292) ..				2 Malloch SPHTM; 1 Malloch USNM
§*latitarsis* Mall. (*Botanobia*): M134(58)	CSIRO	USNM		
latitarsis Mall. (*Coenosia*): M22(332)	SPHTM			1 Ferguson SPHTM
lativentris Mall. (*Hyalomyia*): M54(110–111); M67(97)	USNM			
lativiridens Walk. (*Achias*): M121(137)				1 Malloch USNM; 1 Malloch Aust. M
lativittata Mall. (*Drosophila*): M12(618)	Aust. M	USNM	1 USNM	2 Malloch USNM
lauta Wied. (*Orthellia*): M15(513)				1 Bezzi SPHTM; 5 Malloch USNM
lavata Hend. (*Rivellia*): M73(221)				
leai Mall. (*Helina*): M30(49)	SPHTM			
leonina (Fabr.) (*Amenia*): M37(344); M55(286); M67(101); M99(74–75)				26 Paramonov, 1 Malloch SPHTM; 5 Malloch USNM
leontodontis de Geer (*Tephritis*): M124(462)				
leopoldi Mall. (*Euphumosia*): M107(13–14) ..	Bruxelles			

† The USNM specimen listed as allotype was labelled paratype by Malloch.
‡ The collector of the holotype is J. W. Campbell.
§ Allotype (headless as noted in description) (labelled "paratype" by Malloch) in USNM.

neozealandica Mall. (*Teratomyza*) : M102(113–114)..	Cawthron		1 USNM (headless)	
neozealandicum Mall. (*Melanum*) : M83(418–419) ..	C'bury M	C'bury M	1 USNM	
**neozelandicus* Mall. (*Protoborborus*) : M102(262) ..	BM (NH)	C'bury M	1 USNM	
nicholsoni Mall. (*Drosophila*) : M35(4–5)	SPHTM		2 USNM	
nicholsoni Mall. (*Froggattimyia*) : M104(5) ..	SPHTM			
nicholsoni Mall. (*Prosenina*) : M67(116–117) ..	CSIRO	SPHTM	3 CSIRO; 2 USNM	
nicobarensis (Sch.) (*Pseudoformosina*) : M116(355–356) ; M134(64)				
niger Mall. (*Apocephalus*) : M109(95)	SPHTM			
nigra de Meij. (*Cheesmanomyia*) (*Rioxa*) : M124(420)				
nigra Ender. (*Hammatopelma*) : M122(179)				
nigra Wied. (*Ophyra*) : M13(666) ; M58(169) ; M60(399) ; M95(197)				1 Malloch USNM ; 1 Malloch SPHTM
nigrescens Stein (*Helina*) : M13(670–671) ; M23(41)				4 Malloch USNM
nigribarba Aldr. (*Metallea*) : M36(331)				1 Malloch SPHTM
nigricauda Mall. (*Homoneura*) : M66(209–210) ..	Bishop M		3 BM (NH)	
nigriceps Mall. (*Chaetomosillus*) : M105(1) ..	DEI			
nigriceps Macq. (*Orthellia*) : M15(514)				10 Malloch USNM ; 2 Malloch SPHTM
nigriceps Mall. (*Rutilia*) : M55(306) ; M67(109) ..	Aust. M		3 Aust. M	6 Malloch USNM
nigricornis Ender. (*Actina*) : M45(364)				
nigricornis Thoms. (*Prohippelates*) : M96(216)				
nigricornis flavus Thoms. (*Prohippelates*) : M134(64)				1 Malloch SPHTM
nigricornis (Macq.) (*Sapromyza*) : M45(359)				
nigricornis Mall. (*Semisuturia*) : M37(341) ..	BM (NH)			
nigricosta Mall. (*Cylindromyia*) : M68(312–314) ..	SPHTM (Wings only)			
†*nigricosta* Mall. (*Duomyia*) : M57(511)	DEI		2 USNM	
nigridorsata Mall. (*Hippelates*) (*Cadrema*) : M38(439) ; M128(277)	CSIRO			
nigridorsata Mall. (*Limnophora*) : M65(333) ; M95(199)	USNM			
nigridorsum Mall. (*Aphaniosoma*) : M24(94) ..	SPHTM		8 SPHTM ; 3 USNM	
nigrifacies Mall. (*Achiosoma*) : M121(131) ..	Aust. M			
nigrifacies Mall. (*Euphumosia*) : M107(15–16) ..	Bruxelles			
‡*nigrifemorata* Mall. (*Medinella*) : M119(235–236)..	C'bury M			
nigrifemorata Mall. (*Zealandotachina*) : M119(227)..	C'bury M		9 USNM	2 Malloch USNM
§*nigrifemur* Mall. (*Chloromerus*) : M38(431–432) ..	CSIRO	CSIRO	1 USNM ; 1 CSIRO	
nigrifemur Mall. (*Millerina*) : M26(141) ; M72(293)	USNM			
nigrifrons Mall. (*Drosophila*) : M106(304–305) ..	Bishop M	BM (NH)	3 BM (NH)	
nigrifrons (Kert.) (*Homoneura*) : M132(22)				
nigrifrons Mall. (*Xanthocanace*) : M18(334) ..	SPHTM			
nigrihirta Mall. (*Hyalomyia*) : M54(112) ; M67(97)..	USNM		4 SPHTM ; 7 USNM	4 Malloch SPHTM; 3 Malloch USNM
¶*nigrihirta* Mall. (*Lasiocalypter*) : M67(119–120) ..	SPHTM		2 USNM	1 Curran SPHTM
nigrihirta Mall. (*Macquartia*) : M119(222–223) ..	Cawthron		1 USNM	
nigrihirta Mall. (*Rutilia*) : M110(349–350) ..	BM (NH)			
||*nigrimana* Mall. (*Botanobia*) : M134(59)	CSIRO			
nigrimana Mall. (*Paralauxania*) : M38(411–412) ..	CSIRO			
nigrimana Mall. (*Xenolispa*) : M12(611)	Aust. M (headless)			2 Malloch USNM
nigriorbitalis Mall. (*Limnophora*) : M17(144) ..	SPHTM			2 Malloch USNM
nigripennis de Meij. (*Acanthoneura*) : M124(429–430)				
nigripennis Hend. (*Trypanocentra*) : M124(428, 430)				
nigripes Stein (*Atherigona*) : M14(192)				
nigripes Mall. (*Dichaetomyia*) : M60(404)	Amsterdam			
nigripes Mall. (*Elassogaster*) : M129(70)	BM (NH)		1 BM (NH)	
***nigripes* Mall. (*Exechopalpus*) : M67(132) ..	SPHTM			
nigripes Mall. (*Limnohelina*) : M72(301)	C'bury M	USNM	1 C'bury M	
nigripes Mall. (*Milichiella*) : M78(77)	SPHTM		1 USNM	
nigripes Mall. (*Pollenia*) : M72(320)	USNM			
nigripes Curran (*Prosena*) : M67(115) ; M85(130)..				2 Malloch SPHTM ; 1 Malloch USNM
nigripila Duda (*Lasiopleura*) : M114(24–25) ; M128(272)				1 Malloch SPHTM ; 1 Malloch Sabrosky Coll.
nigriseta Bez. (*Prochaetops*) : M91(3)				
nigriseta (Mall.) (*Rhicnoessa*) : M111(18)				
††*nigriseta* Mall. (*Tethina*) : M18(337) ; M109(92)..	SPHTM			1 Malloch SPHTM ; 1 Malloch USNM ; 1 Malloch BM (NH)
nigrisquama Mall. (*Hyalomyia*) : M54(110) ; M67(95)	Aust. M			
nigrisquama Mall. (*Pollenia*) : M72(319–320) ..	USNM			
nigrita Mall. (*Dohrniphora*) : M25(334)	SPHTM			
nigrita Mall. (*Pollenia*) : M114(22)	SPHTM			
nigritella Mall. (*Lonchaea*) : M74(241)	BM (NH)	BM (NH)		
nigrithorax Mall. (*Anomoea*) : M124(449)	SPHTM			
nigrithorax Mall. (*Mycodrosophila*) : M106(284–285)	BM (NH)		? 3 BM (NH)	

* The type is a ♂, not a ♀ as stated. The paratype is a ♂ (as stated) and the allotype a ♀.

† The two paratypes in USNM were labelled as such by Malloch but no paratypes were specifically mentioned in the original description.

‡ The aberrant specimen from Arthur's P. is in USNM, labelled paratype by Malloch but is not so from the publication.

§ USNM has a specimen labelled paratype by Malloch *ex* Cradle Valley but it is 16 Jan. 1923, not 16 Dec. 1923.

¶ Locality of type specimen is Kosciusko, 11 February 1924 (Nicholson), and not Barrington Tops as stated in the description.

|| The CSIRO type comprises two specimens on one pin.

** Type specimen bears the name *E. atripes*.

†† The identified specimen in USNM is from Sydney, Feb. 1925, and is labelled " paratype ". The species was described from one specimen from Woolgoolga, published in Oct. 1924, five months before this was collected. The Sydney specimen, which cannot be a paratype, is one of those recorded in M109(92).

**picata* (Hutt.) (*Xeneura*): M72(339)				1 Malloch USNM; 1 Malloch C'bury M
picta (B. & B.) (*Euphasia*): M68(326–327)	BM (NH)	Bishop M	1 BM (NH)	2 Malloch USNM
pictifrons Mall. (*Upolumyia*): M106(280–282)	SPHTM			
†*pictigera* Mall. (*Sapromyza*): M109(88–89)				
pictipennis Macq. (*Aphritis*): M1(236)				
pictipennis (Macq.) (*Austrodexia*): M67(123–124)				
pilifrons Mall. (*Sapromyza*): M30(37)				1 Malloch SPHTM
piliventris Mall. (*Helina*): M9(141); M23(42)	SPHTM			2 Malloch USNM
	BM (NH)			
‡*pilosa* Mall. (*Cuphocera*): M68(316–318)				1 Malloch SPHTM; 3 Malloch USNM
piscivora Mall. (*Milichia*): M31(547)	SPHTM		1 USNM	1 Malloch SPHTM
plagiata Bez. (*Epicerella*): M53(11–12); M53(25)	SPHTM		4 USNM	
platycephala Mall. (*Nothoasteia*): M115(259–260)	SPHTM			
platychirus Hend. (*Achias*): M121(134)				
platypalpus Big. (*Atopognathus*): M122(180)				
platyptera Hend. (*Platensina*): M124(458)				
plebeia Mall. (*Actia*): M68(310)	SPHTM		2 USNM	
plebeia Mall. (*Calliphora*): M36(315)	USNM		3 USNM	1 Malloch SPHTM; 9 Malloch USNM
§*plebeia* Mall (*Coelopella*): M101(348)	USNM		3 BM(NH); 9 USNM	
plebeia Mall. (*Melanina*): M38(413)	SPHTM		3 USNM	
plebeia Mall. (*Protomiltogramma*): M69(446–447)	SPHTM	SPHTM	1 USNM; 1 SPHTM	
plebeia de Meij. (*Sepsis*): M25(313)				
¶*plebeia* Mall. (*Tephritis*): M83(393–394); M124(461)	C'bury M		8 USNM	1 Malloch SPHTM; 4 Malloch USNM; 4 F. A. Perkins BM (NH)
plebeius Fall. (*Demoticus*): M55(332)				
plebia Mall. (*Heteria*): M72(329–330)	C'bury M	USNM	12 USNM; 1 BM(NH)	
||*pleuralis* Mall. (*Brachydeutera*): M45(354)				
pleuralis Mall. (*Clusiosoma*): M124(427); M126(259)	BM (NH)		2 USNM; 6 BM(NH)	4 Taylor SPHTM
plumifer Ferg. (*Graptomyza*): M109(87)				
plumifera Bez. (*Rhinomyiobia*): M55(316); M110(365)				
plumiseta Stein (*Limnophora*): M58(165)				
plumiseta Mall. (*Lispocephala*): M52(79)	Bishop M			1 Malloch USNM
plumiseta Mall. (*Sapromyza*): M38(414)	CSIRO			
poecilithorax Mall. (*Drosophila*): M24(87–88)	SPHTM			
poeciliventris Mall. (*Helina*): M9(140); M23(42)	BM (NH)	BM (NH)	1 BM (NH)	2 Malloch SPHTM; 2 Malloch USNM
poeciliventris Mall. (*Leucophenga*): M12(614)	Aust. M (headless)			
polita (Saunders) (*Angitulina*): M122(179)				
polita Mall. (*Diplotoxa*): M74(249)	Bishop M			
polita Mall. (*Hillia*): M55(328)	CSIRO			
polita Mall. (*Leucophenga*): M12(615)	Aust. M			
polita Mall. (*Sarcophaga*): M62(270–272)	Hamburg	Hamburg	2 USNM	6 Malloch USNM
politella Mall. (*Oscinis*): M116(348–349)	CSIRO			1 Malloch SPHTM
politella Mall. (*Rhamphomyia*): M83(425–426)	Cawthron		2 USNM	
politiventris Mall. (*Engycera*): M119(180–181)			2 USNM	
***politiventris* var. *setosa* Mall. (*Engycera*): M119(181)	Bishop M			
pollinosa Mall. (*Lispocephala*): M52(76)	SPHTM			
††*pollinosa* Mall. (*Rhynchomydaea*): M30(48–49)	SPHTM		1 SPHTM; 1 USNM	
pollinosa Mall. (*Tricimba*): M38(443); M83(409)	Aust. M		1 USNM	
polypori Mall. (*Drosophila*): M19(351)				2 Malloch USNM
pornia (Walk.) (*Rioxa*): M124(435)				1 Malloch SPHTM
potens (Walk.) (*Euprosopia*): M121(150)				1 Malloch Aust. M
potina Walk. (*Rutilia*): M55(304)				1 Malloch SPHTM; 3 Malloch USNM
preapicalis (Mall.) (*Homoneura*): M35(15)	Lost		3 USNM	
‡‡*preapicalis* Mall. (*Sapromyzosoma*): M25(320)	USNM			
predatoris Mall. (*Lioscinella*): M134(50)	Lost			
	SPHTM			
prima Ost.-Sack. (*Euxesta*): M96(210)	DEI			
prima Mall. (*Prosochaeta*): M113(95–96)				1 Malloch SPHTM
prima (Ost.-Sack.) (*Pseudeuxesta*): M96(210); M121(98); M129(67)				
prima Tonn. & Mall. (*Xenosciomyza*): M48(162–163)	Cawthron		1 ? USNM	2 F. van Emden BM(NH)
princeps (Curran) (*Erythronychia*) (*Procissio*): M97(447–448)				2 Malloch USNM
princeps Macq. (*Neosaropogon*): M43(300)				

* The two specimens recorded in M72(339) are the two identified specimens listed.

† Type is labelled *S. pictiger*.

‡ The specimen in SPHTM is from Milson I., 10.4.15. An additional label states " Returned with type by Malloch, F. H. Taylor ". Presumably the type was returned to Australia but has since been lost.

§ Of the 9 paratypes in USNM, 5 are from Invercargill, 4 from Otago. The allotype is not marked but could be one of the Invercargill specimens.

¶ The Waiho specimens (in USNM) are dated Feb. 24, not Jan. 24.

|| USNM has the two pins, each with a puparium but with no trace of the corresponding insect on the pin above the puparium. One bears Malloch's usual handwritten label " Type ". The " type adult " is apparently lost but a " type puparium " remains.

** This variety is not listed by Miller 1950 (Catalogue of the Diptera of the New Zealand Sub-Region) and it is possible that it will still be found in New Zealand.

†† It is apparent from M31(554) that Malloch intended to include this species in his genus *Hardyia*.

‡‡ In USNM the pin bearing the type label is empty, as is one other pin. Three ♀♀ are left which have been labelled paratypes. One of these may be the allotype.

strigipes Mall. (*Batrachomyia*) : M38(441) ; M128(264)	CSIRO			
strumosa Bez. (*Epicerella*) : M53(13) ; M53(26) ..	SPHTM			
stygia (Fabr.) (*Calliphora*) : M36(308–309) ; M46(613) ; M72(316) ; M84(65)				4 Malloch, 3 Taylor SPHTM ; 6 Malloch USNM
stylops Ender. (*Laylaisia*) : M121(113)				
subaeneiventris Mall. (*Sapromyza*) : M30(37–38) ..	SPHTM			
subalpina Tonn. & Mall. (*Helosciomyza*) : M48(158–159)	Cawthron			3 Malloch USNM
subapicalis (Macq.) (*Stomatorhinia*) : M36(333–334)				
subarcuata Mall. (*Oscinis*) : M116(347–348) ..	SPHTM			1 Malloch SPHTM 6 Malloch USNM
subdita Collin (*Hilarempis*) : M83(427)				
subnitida Mall. (*Drosophila*) : M35(5)	SPHTM			1 Malloch USNM
subnotata Mall. (*Chloropisca*) : M38(429–430) ; M116(354)	SPHTM		1 SPHTM	1 Malloch SPHTM
subnuda Mall. (*Homoneura*) : M133(141–142) ..	BM (NH)			
subnudus Mall. (*Achias*) : M121(134–135)	BM (NH)	BM (NH)	9 BM (NH)	
subobsoleta Mall. (*Limnophora*) : M58(169)	BM (NH)		1 BM (NH)	
subopacifrons Mall. (*Lioscinella*) : M134(56–57) ..	SPHTM	SPHTM	12 SPHTM; 1 CSIRO	
subpolita Mall. (*Limnophora*) : M65(330)	BM (NH)		3 BM (NH)	
subscutellata Tonn. & Mall. (*Allophylopsis*) : M39(93–94)	Cawthron			
subsessilis Mall. (*Pulpostoma*) : M80(297)	SPHTM (fragmentary)	SPHTM (damaged)	8 USNM ; 4 SPHTM (damaged)	
subspinicosta Tonn. & Mall. (*Helosciomyza*) : M48(161)	Cawthron		1 USNM	
subtilis Hutt. (*Macquartia*) : M97(434)				
subtilis (Hutt.) (*Zealandotachina*) : M119(226)				4 Malloch USNM
subvittata Mall. (*Caricea*) : M22(332–333)	SPHTM			
subvittata Mall. (*Lispocephala*) : M52(88)	Bishop M			
suffusa Mall. (*Dichaetomyia*) : M60(406–407) ..	Amsterdam			
suffusa Mall. (*Oscinis*) : M116(350–351)	CSIRO			
suffusa Mall. (*Sapromyza*) : M30(37)	SPHTM			
sulcata (Beck.) (*Oscinis*) : M116(344)				
sulfurigaster Duda (*Drosophila*) : M106(311)				1 Malloch SPHTM
sumbana Ender. (*Platensina*) : M124(458)				
**surcoufi* Bez. (*Paratricyclea*) : M36(323)				1 Malloch, 2 Taylor SPHTM ; 1 Malloch USNM (under a manuscript name)
surda Curran (*Minettia*) : M133(144)				
suspensa Mall. (*Homoneura*) : M133(141)	BM (NH)			
sultoni Mall. (*Themarohystrix*) : M124(423) ..	SPHTM		3 USNM	
suturalis Stein (*Limnophora*) : M107(7)				
suturalis Mall. (*Lioscinella*) : M134(51)	SPHTM			
†*sydneyensis* Mall. (*Brachydeutera*) : M18(335) ..	SPHTM		1 USNM	3 Malloch USNM
sydneyensis Mall. (*Chloropisca*) : M116(354) ..	SPHTM			
sydneyensis Mall. (*Cylindromyia*) : M68(314–315) ..	CSIRO			
sydneyensis Mall. (*Drosophila*) : M35(5–6) ..	SPHTM		2 USNM	
sydneyensis Sch. (*Xenolispa*) : M12(610)				
sydneyensis Mall. (*Xenosepsis*) : M25(315) ..	SPHTM		1 USNM (headless)	2 Malloch SPHTM ; 4 Malloch USNM
taeniata Wulp (*Lamprogaster*) : M121(145)				
‡*tahuatae* Mall. (*Prochaetops*) : M91(12) ; M112(187)	Bishop M		1 presumed USNM	2 Malloch USNM
taitensis Sch. (*Sarcophaga*) : M64(256–257) ; M92(13)				Series Malloch Bishop M and USNM
§*tarsalis* Mall. (*Asteia*) : M93(116) ; M112(190)	Bishop M			1 Malloch USNM
tarsalis Loew (*Desmometopa*) : M106(327)				? 1 Hill, ? 1 Brit. M, SPHTM
tasmaniensis Mall. (*Aphiochaeta*) : M2(514) ..	USNM		15 USNM (labelled " cotypes ")	
tasmaniensis Mall. (*Ceratolauxania*) : M38(408–409)	SPHTM			
¶*tasmaniensis* Mall. (*Diplotoxa*) : M38(434) ..	CSIRO		1 USNM	
tasmaniensis Mall. (*Helina*) : M9(138) ; M23(41) ..	BM (NH)			
tasmaniensis Mall. (*Incurviseta*) : M38(406)	CSIRO		2 USNM ; 1 CSIRO	2 Malloch USNM
tasmaniensis (Mall.) (*Lioscinella*) : M78(62) ; M134(51)				1 Malloch Sabrosky Coll.
tasmaniensis Mall. (*Oscinosoma*) : M78(62)	SPHTM	SPHTM	1 SPHTM	
||*taylori* Mall. (*Lasiopleura*) : M128(273)	SPHTM		1 USNM	
taylori Mall. (*Pseudospheniscus*) : M124(450–451) ..	SPHTM	BM (NH)		
taylori Mall. (*Scholastes*) : M121(129–130) ..	SPHTM		2 USNM	1 Malloch Aust. M
taylori Mall. (*Tapeigaster*) : M109(94–95)	SPHTM			
tectamus Walk. (*Andrenosoma*) : M43(299)				

* A type specimen in SPHTM labelled *P. australis* Mall. from Melville Island, N.T. (G. F. Hill) appears to be the specimen mentioned as *P. surcoufi* in M36(323).

† The paratype listed for USNM is from Belaringar, N.S.W., 9.9.23. The three specimens listed for USNM as mentified by Malloch are on one mount with a paratype label but are from Eidsvold, Q., 1924, Bancroft, and are not identioned in the original description so can only be considered as identified specimens.

‡ The presumed paratype in USNM is from the correct locality but the other data are 1750 ft., July 9, 1930. The two specimens recorded in M112(187) were erroneously labelled paratypes by Malloch.

§ The specimen recorded in M112(190) is in USNM erroneously labelled paratype by Malloch.

¶ The ♀ in USNM is marked paratype but is presumably the allotype published by Malloch.

|| " Presumed holotype " and " presumed paratype " found unlabelled in Malloch Collection. (Type to be returned to SPHTM, paratype in USNM, labelled as above.) These two specimens stood unlabelled with other *Lasiopleura*. I realized when I came to identify them that they are undoubtedly the holotype and paratype of *L. taylori*. The data on the labels agree exactly with the published information, and the paratype is greasy as stated (C. W. Sabrosky).

**varifrons* Mall. (*Calliphora*): M84(66–67) ..		? USNM		3 Malloch SPHTM
varimana Mall. (*Steganopsis*): M133(133)	BM (NH)			
†*varipalpis* Mall. (*Desmometopa*): M35(7–8) ..	SPHTM (presumed)			
varipennis Mall. (*Scatella*): M111(9)	Bishop M			
varipes Mall. (*Batrachomyia*): M128(264–265) ..	DEI			
‡*varipes* Mall. (*Dacus*): M126(240–241)	BM (NH)	BM (NH)	1 USNM; 1 BM (NH)	
varipes Mall. (*Medinella*): M119(237)	C'bury M	USNM	1 USNM	1 Malloch SPHTM
varipes (Macq.) (*Microcalliphora*): M36(326) ..				
varipes Mall. (*Pseudotrichopoda*): M99(78–79) ..	DEI			
varipes Mall. (*Zealandotachina*): M119(227–230) ..	Cawthron		3 USNM	
varipes var. *varipes* Mall. (*Zealandotachina*): M119(228–229)				
varipes var. *fumata* Mall. (*Zealandotachina*): M119(229)	Cawthron		1 USNM	
varipes var. *fuscata* Mall. (*Zealandotachina*): M119(229)	C'bury M		1 USNM	
§*varipes* var. *strigipes* Mall. (*Zealandotachina*): M119(229)	Cawthron			
varipes var. *lata* Mall. (*Zealandotachina*): M119(229–230)	C'bury M			
¶*variseta* Mall. (*Oscinis*): M116(345–346)	SPHTM		1 USNM	
variventris Mall. (*Sapromyza*): M30(38–39); M35(12)	SPHTM			1 Malloch SPHTM
varivitta Mall. (*Oscinis*): M116(349–350)	SPHTM			
velutina Mall. (*Erythronychia*): M97(444)	Cawthron	USNM	1 USNM	
velutifrons Tonn. & Mall. (*Hydrellia*): M34(15) ..	C'bury M			
ventralis (Walk.) (*Euprosopia*): M121(150–151)				
ventralis Curran (*Naupoda*): M129(75)				
venusta Coq. (*Diploneura*): M110(329)				
venustulus Walk. (*Achias*): M121(134)				
verecunda (Hutt.) (*Huttonobesseria*): M83(385–386)				8 Malloch USNM
verecunda Hutt. (*Phania*): M83(385–386) ..				1 Hardy SPHTM
vernalis White (*Atherimorpha*): M79(275–276) ..				
versicolor Curran (*Amplipila*): M55(336)				
versicolor B. & B. (*Chrysopasta*): M46(616)				
versicolor Stein (*Helina*): M23(43)				
versicolor Mall. (*Lispocephala*): M106(287–289) ..	BM (NH)	Bishop M	3 BM (NH)	
versutus Hutt. (*Occisor*): M119(206)				1 Austen SPHTM
vetutissima Walk. (*Byomyia*): M58(174); M49(333–334)				4 Malloch USNM
vexata Hutt. (*Macquartia*): M97(435); M119(221)				
viatrix (de Meij.) (*Homoneura*): M133(139)				2 Malloch USNM
vicarians Sch. (*Anthomyia*): M23(37)				
vicina Macq. (*Musca*): M95(203)				
victoria Mall. (*Helina*): M9(141–142); M23(42) ..	BM (NH)		1 BM (NH)	
victoriae Hill (*Actina*): M45(364)				
victoriae Mall. (*Sapromyza*): M25(317–318) ..	SPHTM			1 Tonnoir USNM
victoriae Mall. (*Senostoma*): M114(13–14)	SPHTM		2 USNM	1 Malloch USNM
villosa R.-D. (*Calliphora*): M20(640)				3 Malloch USNM (as *Neopollenia villosa*)
viola Mall. (*Lamprogaster*): M57(515–516)	DEI		1 Aust. M	
violacea Macq. (*Chaetogaster*): M37(353); M55(315); M114(19)				1 Malloch, 4 Paramonov SPHTM; 1 Malloch USNM
violacea Ender. (*Giraffomyia*) (*Meachina*): M122(179)				
virgatus Collin (*Ceratomerus*): M83(428)				
virgatus Coq. (*Dacus*): M81(264)				2 Malloch USNM
virgo Hendel (*Rivellia*): M70(492)				
viridana Mall. (*Incurviseta*): M38(407–408) ..	CSIRO		1 USNM	1 Malloch Aust. M; 1 Malloch USNM
viridinigra Macq. (*Rutilia*): M44(332, 334); M55(302)				
viridis Mall. (*Chaetogaster*): M114(19)	SPHTM			1 Malloch SPHTM; 1 Malloch Aust. M; 5 Malloch USNM
viridis Towns. (*Chlororhinia*): M32(498); M36(332); M55(283)				
viridiventris Mall. (*Xenocalliphora*): M72(318) ..	C'bury M			
viridula Mall. (*Incurviseta*): M38(408)	CSIRO		1 USNM	
vittata Curran (*Peremptor*): M55(343); M97(436); M97(454)				
vittata Macq. (*Prosena*): M67(116)				
vittata Mall. (*Stomosis*): M24(89)	SPHTM		1 USNM	1 Malloch USNM; 1 Ferguson SPHTM
vittatus Macq. (*Aphritis*): M1(236)				
vittigera Mall. (*Cerodonta*): M38(423–424) ..	SPHTM			
vittigera Mall. (*Incurviseta*): M38(405–406) ..	CSIRO			
vittigera Mall. (*Trypanea*): M83(400)	C'bury M			
vittipennis de Meij. (*Grammicomyia*): M110(343)				
vittithorax Mall. (*Scatella*): M25(331)	SPHTM		1 USNM	1 Ferguson SPHTM
vittithorax Mall. (*Trypanocentra*): M124(429) ..	BM (NH)			

* The ? allotype in USNM is labelled merely "*Calliphora varifrons* Mall." Its sex and data agree with the details published for the allotype.

† A specimen labelled "*Desmometopa varicornis* Type" agrees perfectly, in description and in specimen data, with *D. varipalpis* (M35, pp. 7–8). It seems almost certain that this is the type of *D. varipalpis*. Malloch did err in saying that the specimen was a female, though he could scarcely tell from the condition of the specimen.

‡ The paratype in USNM is dated 24.v.1934, not 14.v.1934 as published.

§ USNM has three specimens marked "*strigipes* paratype" by Malloch which are the Mt. Ida and two without locality cited under the second "*fuscata*" on p. 229. Malloch apparently got the text mixed up here.

¶ Paratype in USNM. Date is actually Nov. 25, not 15; the "2" is poorly printed.