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Fourteen new species of the genus *Nesamblyops* Jeannel (Coleoptera: Carabidae: Anillini) from the South Island of New Zealand with redescription of the genus and description of a new subtribe

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Abstract

Fourteen new species of flightless litter ground beetles of the tribe Anillini, genus *Nesamblyops*, from the South Island of New Zealand, are described. The only hitherto described species from the South Island, *Nesamblyops subcaecus* (Broun), is similar to the new species from Southland, *N. viator* **n. sp.** (type locality: New Zealand, South Island, Fiordland, Resolution Island), based on the structure of male genitalia. The species assembly inhabiting the northwest corner of the South Island comprises two partly sympatric groups composed of three related allopatric species each. The first group includes *N. canaanensis* **n. sp.** (type locality: New Zealand, South Island, Nelson, Abel Tasman National Park, Canaan area), *N. hobbit* **n. sp.** (type locality: New Zealand, South Island, Nelson, Kahurangi National Park, Mt Domett), and *N. ovipennis* **n. sp.** (type locality: New Zealand, South Island, Nelson, Kahurangi National Park, Mt Arthur). The second group represents another lineage and contains *N. rotundicollis* **n. sp.** (type locality: New Zealand, South Island, Nelson, Kahurangi National Park, Onekaka area), *N. solitarius* **n. sp.** (type locality: New Zealand, South Island, West Coast, western foothills of Victoria Range, Capleston area), and *N. subrufus* **n. sp.** (type locality: New Zealand, South Island, West Coast, Upper Buller Gorge, Dublin Terrace). Three additional species known from the northwest corner of the South Island, based on the structure of male genitalia, are unrelated to each other and remaining species of the region. These are *N. karamea* **n. sp.** (type locality: New Zealand, South Island, West Coast, Kahurangi National Park, the Karamea River Gorge area), *N. montanus* **n. sp.** (type locality: New Zealand, South Island, Nelson, Kahurangi National Park, Lake Sylvester area), and *N. kuscheli* **n. sp.** (type locality: New Zealand, South Island, Nelson, Kahurangi National Park, Mt Arthur). The latter species is presumably closely related to the species from the central parts of the West Coast, *N. moorei* **n. sp.,** (type locality: New Zealand, South Island, West Coast, Ngahere area, Mawhera Forest). Additionally, the central part of the West Coast is inhabited by a small group of two species, *N. disjunctus* **n. sp.** (type locality: New Zealand, South Island, West Coast, E slope of the Paparoa Range, Fletcher Creek area), and *N. victoriae* **n. sp.** (type locality: New Zealand, South Island, West Coast, Victoria Range, Capleston area). According to the structure of the male genitalia, this group represents a separate lineage within the genus. The most unusual structure of male genitalia belongs to a species without eyes, a trait previously unknown in *Nesamblyops*, *N. magnificus* **n. sp.** (type locality: New Zealand, South Island, Coastal Otago, Allison Conservation Area) that inhabits the southeast corner of the South Island. Digital images of habitus, body parts, drawings of genitalia, as well as distribution maps are provided for all described species. Morphological evidence of the isolated position of *Nesamblyops* within the tribe Anillini is discussed, with a focus on the morphological comparison of *Nesamblyops* with the members of Anillini, Tachyini, Bembidiini, Zolini, and Sinozolini, and on the data of published molecular analyses. A new subtribe for the representatives of the genus, Nesamblyopina, **n. subtr**., is proposed; the newly discovered morphological characters have been incorporated in the redescription of the genus.

Key words: Adephaga, eyeless, taxonomy, morphology, distribution, new characters

Introduction

This paper is the second contribution to the taxonomic study of representatives of *Nesamblyops* Jeannel of New Zealand and presents the results of examination of the species inhabiting the South Island, excluding those that had already been studied (Sokolov 2023). Species of this genus have eyes, which is uncommon for the members

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of the tribe Anillini that includes predominantly blind species, and dwell in forest litter and subterranean habitats of New Zealand, a region well known as a host of relictual lineages (Procheş *et al*. 2015). These facts allude to the ancient origin of *Nesamblyops*; however, the genus has not received significant attention from researchers. Historically, René Jeannel was the first to mention a peculiar status of the species of *Nesamblyops* (Jeannel 1937). Discussing biogeographical aspects of the Gondwana genera of anillines, Jeannel emphasized the primitive state of the elytral umbilical series of pores specific for the members of *Nesamblyops* (p. 360, Jeannel 1937). He considered the reduced number of pores (eight instead of nine) in the umbilical series and their positioning close to the elytral margin as a primitive state. This configuration of pores allowed Jeannel to postulate the intermediary position of the genus *Nesamblyops* between Anillini and Tachyini and assume the isolation of the genus since the Mesozoic era with a type of chaetotaxy close to the ancestral type of Anillini. Later, in his monograph Jeannel (1963) changed his opinion about the number of pores in the umbilical series of the members of *Nesamblyops* and considered this number to be nine, thus casting doubt on the validity of all his previous statements. As will be shown below, the results of my examination of the morphology of the species of *Nesamblyops* are in agreement with the oldest statement of Jeannel (1937): the umbilical series of the members of *Nesamblyops* consists of eight pores with the eighth pore bearing a long seta.

In spite of almost worldwide distribution and high diversity, the systematics and phylogenetics of Anillini remains far from perfect and is in great need of modern treatment. The only comprehensive systematic review of Anillini published to date is a monograph of René Jeannel (1963), where the tribe was structured and all representatives were placed in appropriate morphological groups in accordance to the author's view on their relationships and comparative role of traits served as classifying characters. It was a second attempt of the author to present his view on the systematics of Anillini. The first classification proposed 30 years earlier (Jeannel 1937) was based on the configuration of the elytral umbilicate series of pores, and resulted in splitting Anillini into two subtribes Anillina and Scotodipnina, with three lineages of supposedly related genera in each of them. By 1963 Jeannel changed his view on the significance of the umbilical series of pores and based his new classification on the presence (division Aphaenodontes) or absence (division Phanerodontes) of a mental tooth as a more natural trait for grouping Anillini. Only within proposed divisions subsequent grouping was made on the basis of the configuration of the umbilical series of pores, that together with other characters resulted in hypothesizing eleven phyletic lineages of the World Anillini in total. Since then, though many authors in their publications showed numerous mistakes and wrongly interpreted significance of many characters used by Jeannel in his classification of Anillini (e.g. Giachino & Vailati 2011), only Jeanne (1973) tried to reorganize the Jeannel's system on the basis of his investigation of the Mediterranean Anillini. Practically Jeanne (l.c.) returned to Jeannel's old system (Jeannel 1937), and showed once more the importance of the configuration of the elytral umbilical series of pores in classification of Anillini. This resulted in proposing the third subtribe Typhlocharina in addition to the old two, Anillina and Scotodipnina.

During the last decade, several publications on phylogenetic relationships within Anillini have been published (Maddison & Ober 2011; Andujar *et al.* 2016; Maddison *et al.* 2019). All three studies were based exclusively on molecular data and were consistent regarding the position of *Nesamblyops*. The genus occupied the separate basal clade on all phylogenetic trees and was treated as a sister group to all other anillines. Taking into account the comments of Jeannel about the intermediary position of *Nesamblyops* between Anillini and Tachyini, the results of published molecular analyses, and the paucity of our knowledge of the morphology of *Nesamblyops,* thorough examination of morphological traits of the representatives of the genus, as well as the members of different taxa close to Anillini was performed. Overall, the examination of the morphology of the South Island specimens resulted in the discovery of fourteen species new to science, while a comparison of the species of *Nesamblyops* with other members of the tribe Anillini has brought me to the conclusion that the genus *Nesamblyops* represents a morphologically distinct lineage quite remote from other representatives of the tribe and deserves its own suprageneric status.

The paper includes a description of the new subtribe, redescription of the genus, and descriptions of fourteen new species of *Nesamblyops*.

Material and Methods

This study is based on examination of more than 578 specimens of *Nesamblyops* from the collection of the New Zealand Arthropod Museum (Auckland, New Zealand, further NZAC), and from the private collection of J. Nunn

(Dunedin, New Zealand). Verbatim label data are given for type specimens of all newly described taxa, with label breaks indicated by a slash ("\").

To avoid misinterpretations in the number of elytral pores, only taxa with fully developed elytra were chosen for morphological analysis. Analysis was based on investigation of the labiomaxillary complex, structure of pronotum and pterothorax, configuration of elytral umbilical series of pores, setation of protibia, and morphology of male and female genitalia. Information on the character states was obtained from microscopic examination of specimens deposited in the collection of National Museum of Natural History (Washington, DC, USA, further NMNH), from the author's personal collection, or literature data. Specifically, all non-anilline species used for morphological comparison, like species of the genera *Phrypeus* Casey, *Merizodus* Solier, *Amerizus* Chaudoir, *Lionepha* Casey, *Xystosomus* Schaum, *Erwiniana* Paulsen & Smith, *Geballusa* Erwin, *Gouleta* Erwin, *Mioptachys* Bates, *Pericompsus* LeConte, *Elaphropus* Motschulsky, *Paratachys* Casey, *Tachyta* Kirby, and *Tachys* Dejean, originated from the NMNH collection. Data on European *Typhlocharis* Dieck (the member of subtribe Typhlocharina) were taken from the Andujar *et al*. (2008). Data on the other genera of anillines, like *Zeanillus* Jeannel, *Pelodiaetus* Jeannel, *Pelodiaetodes* Moore, *Geocharidius* Jeannel (all members of Scotodipnina), and *Anillinus* Casey, *Serranillus* Barr (both members of Anillina) were taken from the author's personal database (Table 1).

Measurements. All specimens of newly described species were measured electronically using a Leica M420 microscope equipped with a Syncroscopy AutoMontage Photomicroscopy system (SYNCROSCOPY, Synoptics Ltd.). Measurements for various body parts are encoded as follows: LH = length of head, measured along midline from anterior margin of labrum to the virtual line, connecting posterior supraorbital setae; WH = width of head, at level of anterior supraorbital setae; WPm = maximal width across pronotum; WPa = width across anterior angles of pronotum; WPp = width across basilateral setae of pronotum; LP = length of pronotum from base to apex along midline; WE = width of elytra, at level of 4th umbilicate setae; LE = length of elytra and pygidium, from apex of scutellum to apex of pygidium; SBL = standardized body length, a sum of LH, LP and LE. SBL measurements are given in mm; others are presented as nine ratios: body proportions-WH/WPm, WPm/WE, LE/SBL, WE/SBL and LP/LE, and body parts-WPa/WPp, WPm/WPp, WPm/LP, WE/LE. All values are given as mean ± standard deviation.

Illustrations. Digital photographs of the dorsal habitus of new species were taken with the AutoMontage system using a Leica M420 microscope. Line drawings of selected body parts were made using a camera lucida on an Olympus BX 50 microscope. Scanning electron micrographs were made using an ESEM FEI Quanta 200 and gold coated specimens.

Dissections. Method of dissections follows that of Sokolov (2013) and Sokolov and Kavanaugh (2014).

Type material. The author had no opportunity to examine type material of *Nesamblyops*. Species concept of *N. subcaecus* is based on the examination of modern material obtained from the localities adjacent to the typical locality of this species.

Terms. Terms used in the paper follow Sokolov *et al.* (2004) and Sokolov (2013). New Zealand geographical area names and their codes follow Crosby *et al.* (1998).

Species ranking. Species recognition is in accordance with our previous approach (Sokolov *et al*. 2004).

Descriptions. The scheme of descriptions follows that of Ball & Shpeley (2009).

Taxonomic treatment

Family Carabidae Latreille, 1802

Subfamily Trechinae Bonelli, 1810

Tribe Anillini Jeannel, 1937

Nesamblyopina, subtribe nova

Type genus: ***Nesamblyops*** Jeannel, 1937 (here designated).

TABLE 1. Variation of character states among the representatives of the Trechinae (character states of Nesamblyopina are marked with blue color).

n/n	Species	Tribe/ Subtribe	Stipital * chaetotaxy, longest setae	Setation on basal margin of pronotum	Mesoepi-sternum, suture	Metasternal process, margination	Metaventrite**, length	Umbilical setal pores, number	Distance *** from elytral margin to 5 & 6USP	Posterior setal row, psr, n setae	Ovipositor, ensiform setae, n
			1	2	3	4	5	6	8	9	10
1	*Phrypeus rickseckeri* (Hayward)	Sinozolini	1MedProx	Present	Present	Unmargined	> Ø mscx	8	5=6	7	0
2	*Merizodus angusticollis* Solier	Zolini	1MedProx	Absent	Present	Margined	> Ø mscx	9	5=6	8	0
3	*Merizodus soledadinus* (Guerin-Meneville)		1MedProx	Absent	Present	Margined	= Ø mscx	9	5=6	7	0
4	*Amerizus oblongulus* (Mannerheim)	Bembidiini	1MedProx	Absent	Present	Margined	= Ø mscx	8	5=6	4	n/a
5	*Lionepha osculans* (Casey)	Bembidiini	1MedProx	Absent	Present	Margined	= Ø mscx	9	5=6	2	0
6	*Xystosomus inflatus* (Schaum)	Xystosomina	1MedProx	Absent	Present	Margined	= ¼ Ø mscx	8	5=6	2	2 + 1
7	*Xystosomus turgidus* (Schaum)	Xystosomina	1MedProx	Absent	Present	Margined	= ¼ Ø mscx	8	5=6	4	2 + 1
8	*Xystosomus tholus* (Erwin)	Xystosomina	1MedProx	Absent	Present	Margined	= ¼ Ø mscx	8	5=6	4	2 + 1
9	*Erwiniana sublaevis* (Bates)	Xystosomina	1MedProx	Absent	Present	Margined	= Ø mscx	8	5=6	3	2 + 1
10	*Erwiniana sulcicostis* (Bates)	Xystosomina	1MedProx	Absent	Present	Margined	= ⅔ Ø mscx	8	5=6	2	2 + 1
11	*Geballusa microtreta* (Erwin)	Xystosomina	1MedProx	Absent	Present	Margined	= Ø mscx	8	5=6	3	3 + 1
12	*Gouleta cayennensis* (Dejean)	Xystosomina	1MedProx	Absent	Present	Unmargined	= Ø mscx	8	5=6	6	2 + 1
13	*Mioptachys flavicauda* (Say)	Xystosomina	1MedProx	Absent	Present	Margined	= ⅔ Ø mscx	8	5=6	4	2 + 1
14	*Pericompsus reichei* (Putzeys)	Tachyina	1MedProx	Absent	Present	Unmargined	> Ø mscx	8	5=6	10	1
15	*Elaphropus ferrugineus* (Dejean)	Tachyina	1MedProx	Absent	Present	Margined	= ½ Ø mscx	8	5=6	10	2 + 1
16	*Paratachys scitulus* LeConte	Tachyina	1MedProx	Absent	Present	Margined	= Ø mscx	8	5>6	9	2 + 1
17	*Tachyta inornata* (Say)	Tachyina	1MedProx	Absent	Present	Margined	= Ø mscx	8	5=6	11	2 + 1
18	*Tachys vittiger* LeConte	Tachyina	1MedProx	Absent	Present	Margined	> Ø mscx	8	5=6	10	2 + 1
19	*Nesamblyops oreobius* (Broun)	Anillini	2Med+1Bas	Absent	Present	Margined	= ¼ Ø mscx	8	5=6	6	2 + 1
20	*Nesamblyops subcaecus* (Broun)	Anillini	2Med+1Bas	Absent	Present	Margined	= ¼ Ø mscx	8	5=6	5	2 + 1
21	*Zeanillus pallidus* (Broun)	Anillini	1MedProx	Present	Absent	Unmargined	= ⅔ Ø mscx	9	5>6	14	2
22	*Pelodiaetus sulcatipennis* Jeannel	Anillini	1MedProx	Present	Absent	Unmargined	= Ø mscx	9	5>6	12	2
23	*Pelodiaetodes prominens* Moore	Anillini	1MedProx	Present	Absent	Unmargined	= ⅔ Ø mscx	9	5>6	12	2
24	*Anillinus lescheni* Sokolov and Carlton	Anillini	1MedProx	Absent	Absent	Unmargined	= Ø mscx	9	5>6	10	2
25	*Serranillus jeanneli* Barr	Anillini	1MedProx	Absent	Absent	Unmargined	= Ø mscx	9	5>6	9	2
26	*Geocharidius zullinii* Vigna Taglianti	Anillini	1MedProx	Present	Absent	Unmargined	= ½ Ø mscx	9	5>6	11	2
27	*Typhlocharis martini* Andujar, Lencina and Serrano	Anillini	1MedProx	Present	Absent	Unmargined	= Ø mscx	7	5=6	9	0

* Med—medial setae, MedProx—medial proximal seta, Bas—basal seta;

** Ø mscx—diameter of mesocoxa;

*** 5 & 6USP—5th and 6th pores of umbilical series; "5=6" means: the distance from 5th pore to elytral margin equals the distance from 6th pore to elytral margin

Subtribal name. Based on the name of the type genus.

Recognition. The new subtribe comprises members of Anillini with the following combination of diagnostic features: (1) basistipes of maxilla with four setae (two basal and two medial), of which outer basal and both medial stipital setae of similar length (Figs 2A–B, bss, mss); (2) posterior angles of pronotum rounded and without basolateral denticles (Figs 3A–B); (3) basal margin of pronotum lacking marginal setation (Figs 3A–B, cf. with Figs 3F–I, bst); (4) pterothorax with well-developed mesothoracic anapleural sutures (Figs 4A–B, msts); (5) metaventrite (Figs 4A–B, mtv) very short with distance between meso- and metacoxae about 0.15–0.20 diameter of mesocoxa; (6) metaventral process (Figs 4A–B, mtp) narrowly margined; (7) metendosternite of T-shape, without visible lateral arms (Figs 5A–D); (8) elytra with umbilical series of eight pores situated along virtual line almost parallel to lateral elytral margin (Figs 6A–B); (9) protibia with short oblique notch and short posterior setal row of 4–6 setae (Figs 7A–B, psr); (10) basal lobes of median lobe of males asymmetrical (Figs 14–16); (11) ovipositor of females with gonocoxite 2 with three (1 medial + 2 lateral) ensiform setae (Figs 8A–B, mes, les1–2).

Relationships within Anillini. The new subtribe represents a morphologically distinct lineage within the tribe Anillini and differs from other tribe representatives in many important characteristics of the labiomaxillary complex, pronotum, pterothorax, elytral and leg chaetotaxy as well as the structural details of the male and female genitalia, traits which did not attract significant attention from researchers who worked on the taxonomy of Anillini.

Labiomaxillary complex. The members of Nesamblyopina have setae of undifferentiated length on the basistipes (plesiomorphic state). This distinguishes them from other representatives of Anillini, which have the medial proximal seta on basistipes much longer than the others (derived state) either in the basal position (members of Typhlocharina, cf. Fig. 3, p. 12 in Serrano & Aguiar (2006); Fig. 2d, p. 39 in Andujar *et al.* (2008); Fig. 2b, p. 51 in Andujar *et al.* (2010)) or closer to the middle of sclerite (members of Anillina and Scotodipnina, as in Figs 2C–F, mss).

Pronotum. The vast majority of anilline taxa have a pronotum with basolateral denticles and posterior angles with varying degrees of prominence (cf. anilline fauna of Greece in Giachino & Vailati 2011). Rounded posterior angles are rare among anillines and have been reported for several genera only. Within its distributional range, the members of Nesamblyopina share the state of rounded posterior pronotal angles with their geographical and ecological neighbours, the anilline species of the genus *Zeanillus* Jeannel (cf. Figs 3A–B and 3G). Outside New Zealand, the members of Nesamblyopina share the state of rounded posterior angles with the following genera of the Old World: cavernicolous European *Aphaenotyphlus* Español & Comas (Ortuno & Sendra 2007) and a group of African and Madagascan genera with shortened elytra, such as *Bulirschia* Giachino, *Caeconannus* Jeannel, *Cryptorites* Jeannel, and *Microdipnites* Jeannel (Giachino 2008, 2015). Interestingly, none of the species of Anillini with rounded posterior angles of the pronotum have been documented in the New World to date. It seems that all cases of similarity in the shape of the posterior angles between Nesamblyopina and Old World anillines are homoplastic, since this state of character arose in different phyletic lineages and subtribes of the tribe.

Another pronotal character, the setation of the basal margin of the pronotum, is also widely distributed among the representatives of Anillini. Like the situation with the state of posterior pronotal angles, cases where setation is lacking are not common among the species of the tribe. Noteworthy, the members of Nesamblyopina share the lack of setation on the basal margin of the pronotum with the North American lineage of Anillini, specifically, *Anillinus* Casey, *Serranillus* Barr, *Anillodes* Jeannel, *Anillaspis* Jeannel, and *Medusapyga* LaBonte & Maddison (2023). Recent results of molecular analysis have placed all these North American genera in a separate clade on the phylogenetic tree of Anillini right above the *Nesamblyops* clade, i.e., as a sister clade to all other Anillini except *Nesamblyops* (Andujar *et al.* 2016; Maddison *et al.* 2019). To date, the lack of setation of the basal margin of the pronotum is the only known morphological trait allowing researchers to distinguish the members of the North American Anillini from other members of the tribe. In accordance with the basal positions of both clades on the tree, such state of setation can be treated as a symplesiomorphy for both clades. Unfortunately, the taxon coverage in the abovementioned molecular analyses of Anillini is far from perfect, given that only 17 genera were analyzed from almost 100 described to date. Therefore, clade positions on the tree and their composition might be subject to change in the future after additional material is examined in molecular analysis.

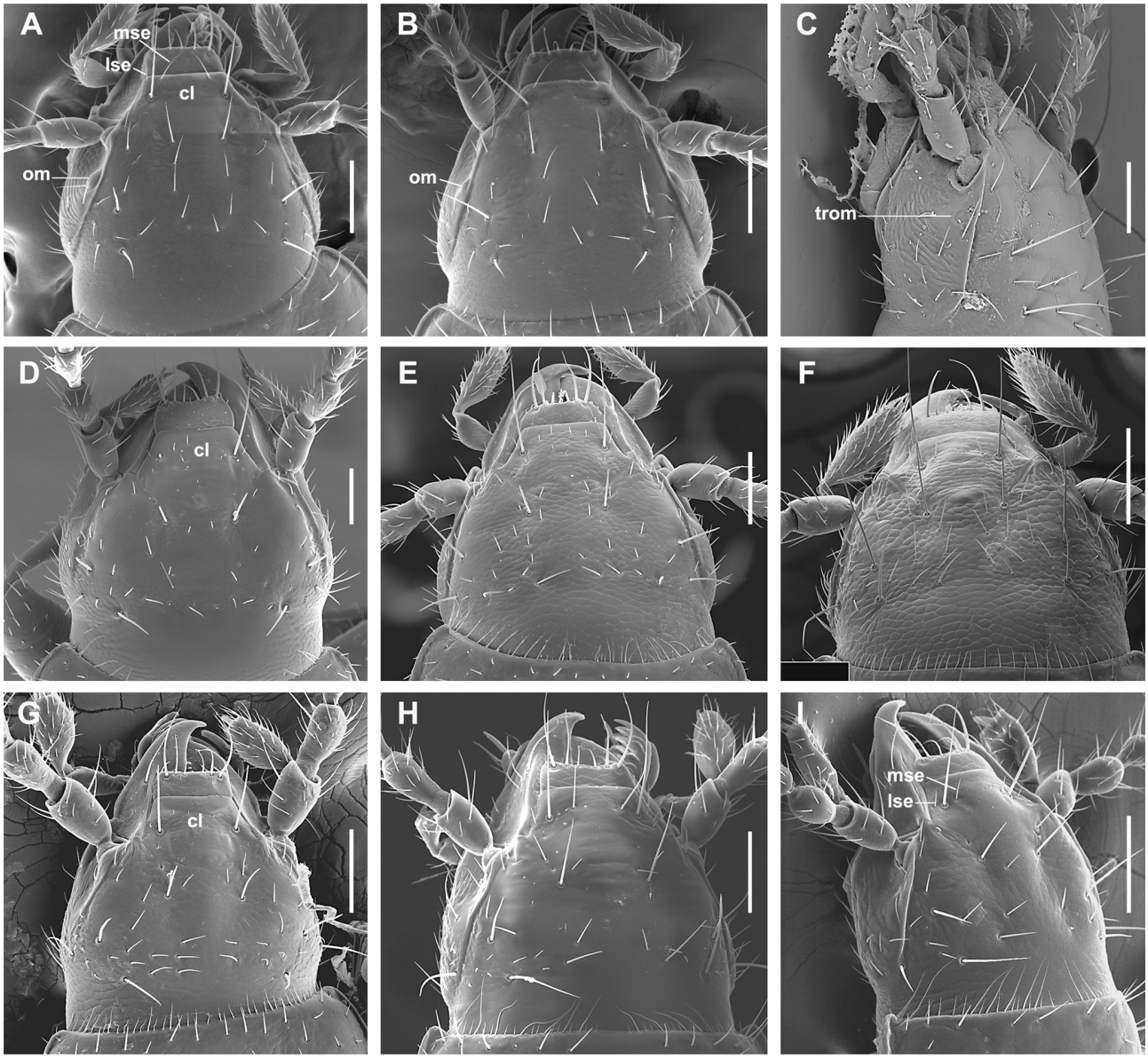

FIGURE 1. SEM illustrations of structural features of heads of Anillini: **A**–**C**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Nesamblyops magnificus,* **n.sp.**; **D**—*Anillinus alleni* Sokolov and Carlton; **E**—*Anillinus acutipennis* Sokolov and Reddell; **F**—*Geocharidius jalapensis* Sokolov and Kavanaugh; **G**—*Zeanillus punctigerus* (Broun); **H**—*Pelodiaetodes nunni* Sokolov; **I**—*Pelodiaetus sulcatipennis* Jeannel. Legend: cl—clypaeus, lse—lateral clypeal setula, mse—medial clypeal setula, om—ommatidium, trom—trace of disappeared ommatidium. Scale = 0.1 mm.

Pterothorax. The structure of the pterothorax of the members of Nesamblyopina differs significantly from that of other Anillini in many aspects. For instance, mesothoracic anapleural sutures can be observed in all representatives of the tribe on microscopic slides in translucent light. However, external traces of sutures are obliterated (apomorphic state) and cannot be seen on specimens in direct light in all anillines in which the mesothorax configuration is documented (cf. Figs 4C–I with Figs 4A–B, msts). At present, the members of Nesamblyopina are the only anillines that have externally visible mesothoracic anapleural sutures (plesiomorphic state).

An entirely similar situation exists with the metaventral process. All anilline species in which the metaventrite configuration is documented possess an unmargined metaventral process, whereas the members of Nesamblyopina have a metaventral process with a distinct and narrow margination (cf. Figs 4A–B with Figs 4C–I, mtp). Unfortunately, polarity for this character cannot be determined with certainty.

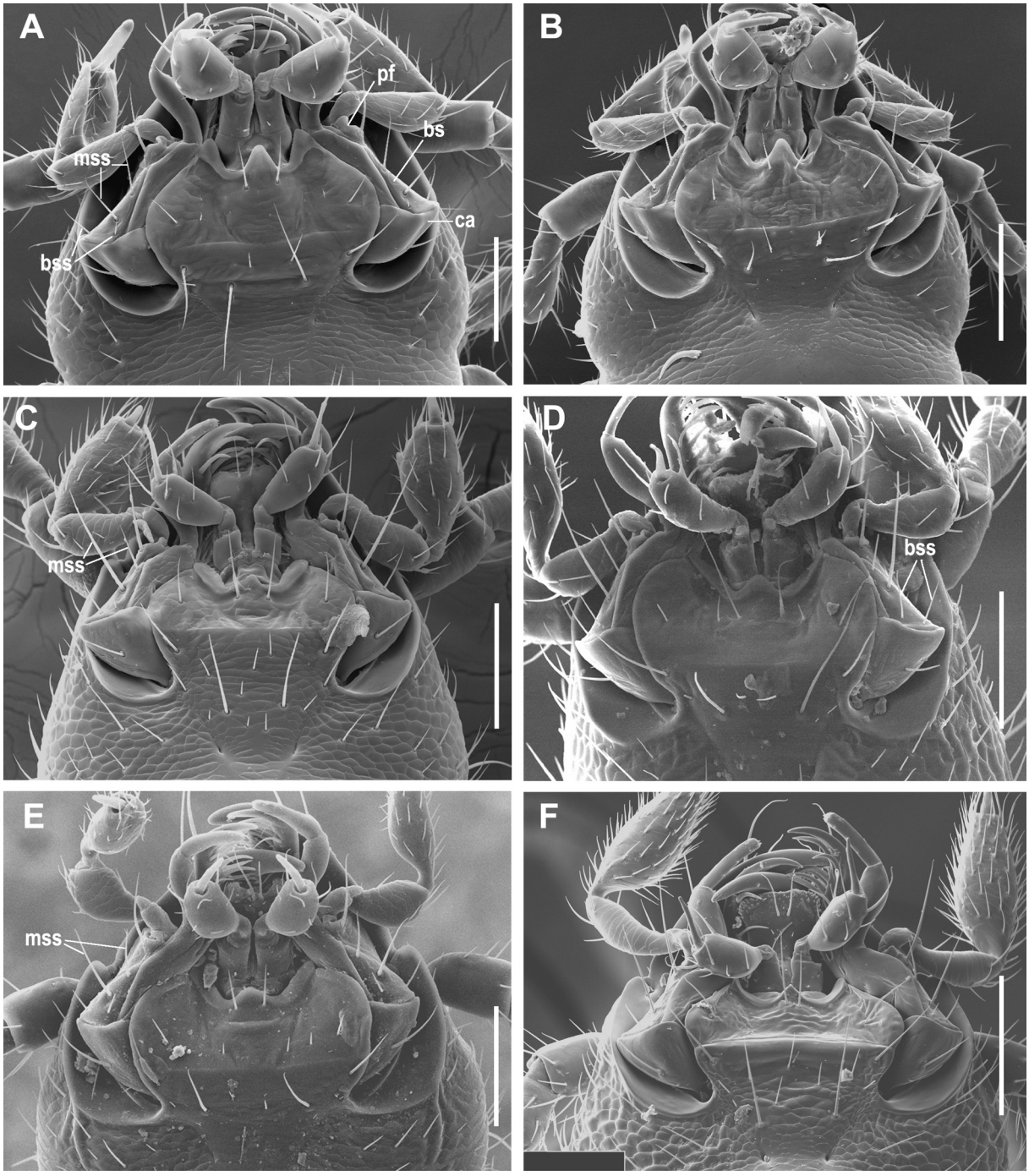

FIGURE 2. SEM illustrations of structural features of labial complex of Anillini: **A**–**B**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Zeanillus punctigerus* (Broun); **D**—*Pelodiaetodes insularis* Sokolov; **E**—*Anillinus forthoodensis* Sokolov and Reddell; **F**—*Geocharidius minimus* Sokolov and Kavanaugh. Legend: ca—cardo, bs—basistipes, bss—basal stipital setae, mss—medial stipital setae, pf—palpifer. Scale = 0.1 mm.

The members of the tribe Anillini are flightless species, and it is clear that different parts of their pterothorax may have undergone different degrees of reduction over the course of their evolution. For Anillini, this is true in terms of the length of the metaventrite and the shape of the metendosternite. In our case, the members of Nesamblyopina possess the shortest metaventrite among the species of Anillini (cf. Figs 4A–B with Figs 4C–I, mtv) in which the configuration of metaventrite is documented. Given that many taxa among Anillini exhibit reduced elytra, which sometimes can reach only half the length of the abdomen, it is reasonable to expect that species with very short metaventrite may be discovered in the future among other anillines also. Additionally, the members of Nesamblyopina possess reduced configuration of metendoventrite without distinct lateral arms. They share the

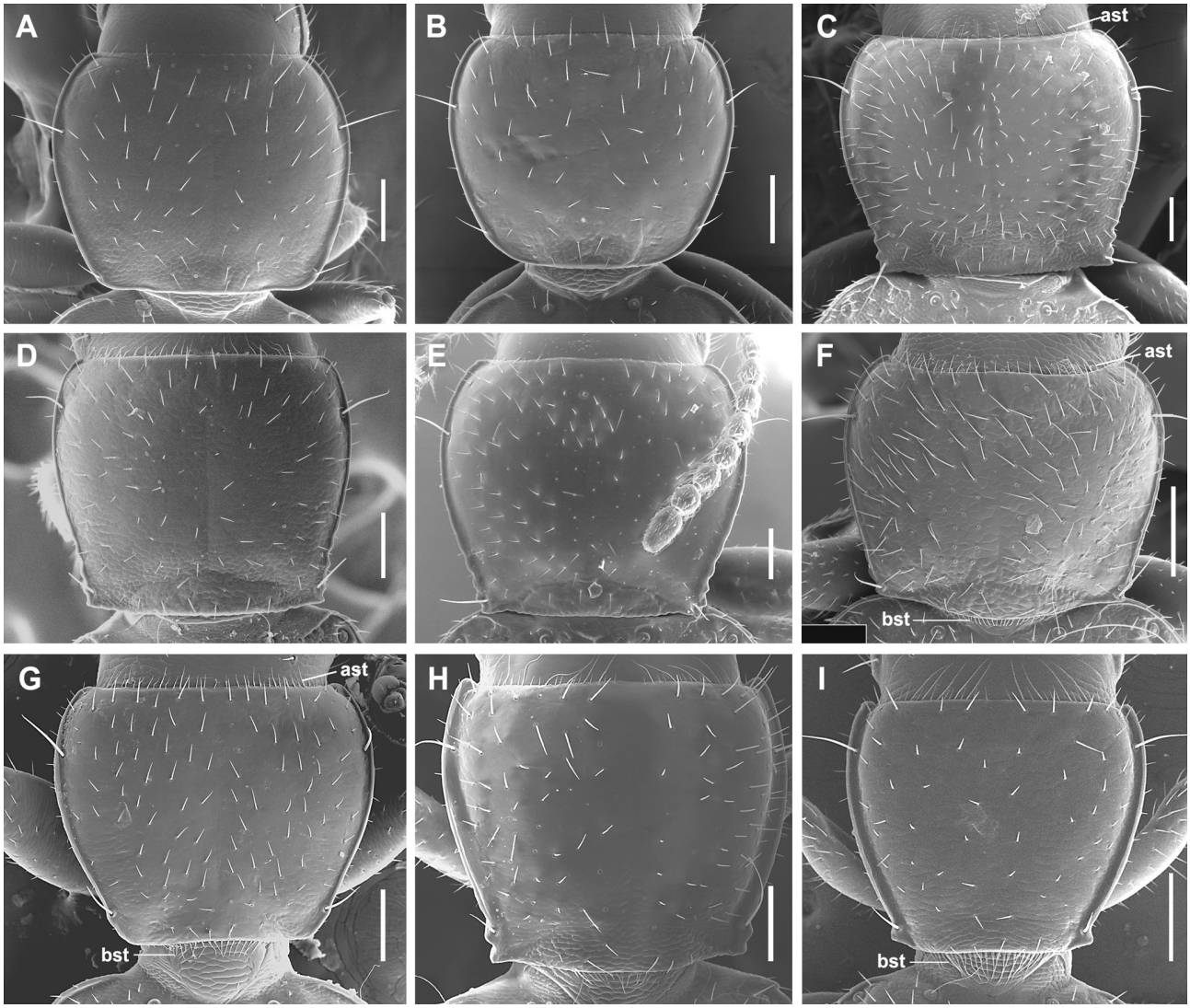

FIGURE 3. SEM illustrations of structural features of pronota of Anillini: **A**–**B**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Anillinus alleni* Sokolov and Carlton; **D**—*Anillinus forthoodensis* Sokolov and Reddell; **E**—*Serranillus jeanneli* Barr; **F**—*Geocharidius balini* Sokolov and Kavanaugh; **G**—*Zeanillus punctigerus* (Broun); **H**—*Pelodiaetodes nunni* Sokolov; **I**—*Pelodiaetus nunni* Sokolov. Legend: ast—setae of anterior margin of pronotum, bst—setae of basal margin of pronotum. Scale = 0.1 mm.

lack of lateral arms with the species of several genera whose structures of metendosternites are documented, like *Anillinus*, *Serranillus*, and *Geocharidius* Jeannel (cf. Figs 5A–D with Figs 5E–H, mtes, and both with the species that have lateral arms as in Figs 5I–P, mtes). Together with the fact that *Anillinus* and *Geocharidius* belong to different clades on the phylogenetic tree of Trechinae (Maddison *et al.* 2019), in both cases states of metaventrite and metendosternite in Nesamblyopina may be considered as homoplastic.

Elytral chaetotaxy. The members of Nesamblyopina have eight pores in the elytral umbilical series, while the vast majority of the species of Anillini have elytral umbilical series with nine pores (all species of subtribes Anillina and Scotodipnina with fully developed elytra). Nevertheless, the eight-pore configuration in the umbilical series can be found in some members of the subtribe Typhlocharina (e.g., cf. Figs 6A–B, with the umbilical series of *Typhlocharis* [now *Lusotyphlus*] *algarvensis* Coiffait on Fig. 1, p. 151, or with the umbilical series of *Typhlocharis silvanoides* Dieck on Fig. 2, p. 141 in Zaballos & Perez-Gonzales (2010, 2011) respectively). It is supposed that this configuration of the umbilical series of pores in Typhlocharina arose as a result of the adaptations to the endogean way of life (Jeanne 1973). However, the majority of species of Nesamblyopina are litter-dwellers, so similar elytral chaetotaxy in these two subtribes presumably evolved independently, and it is likely, in this case, that the resemblance is homoplastic.

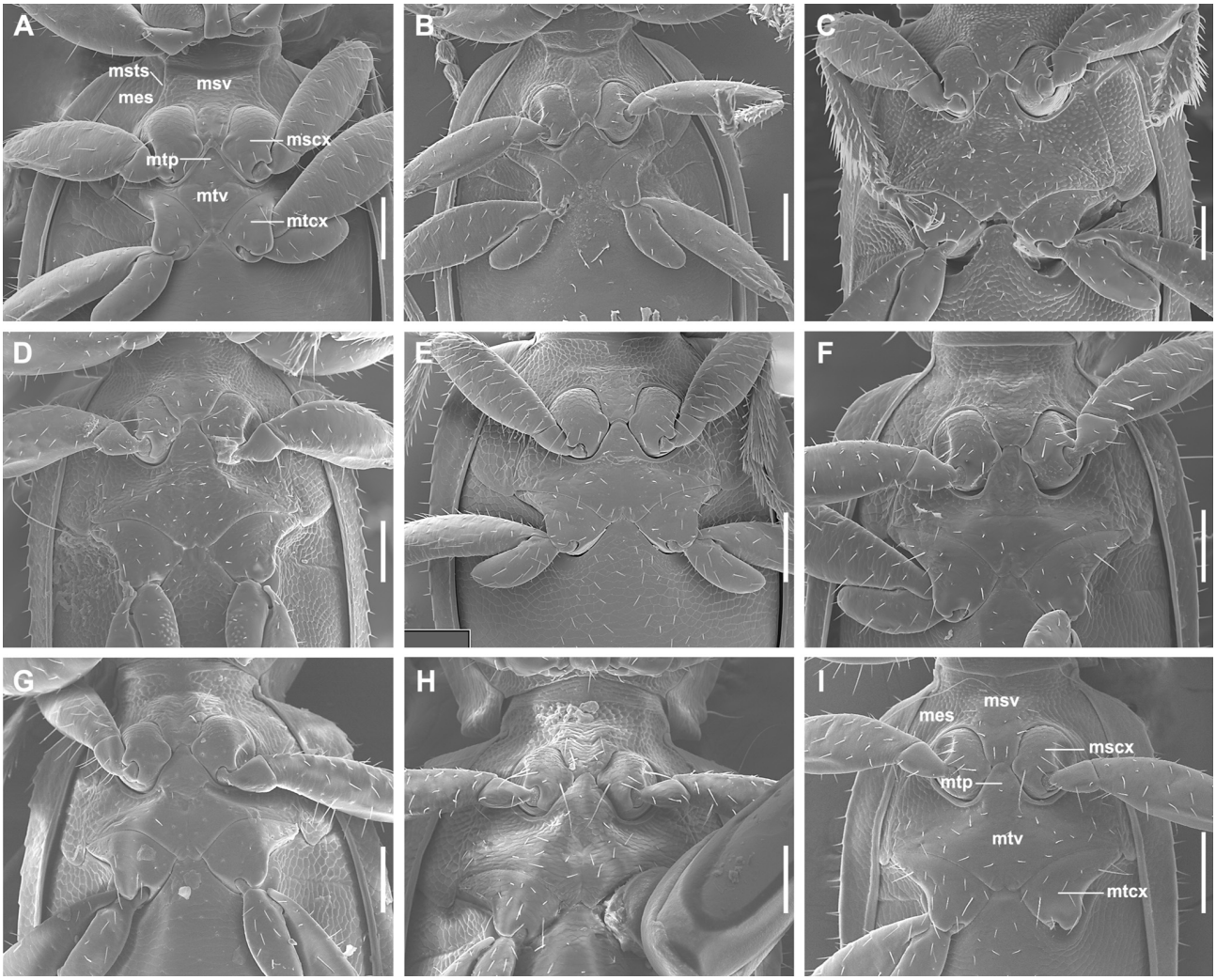

FIGURE 4. SEM illustrations of structural features of pterothorax of Anillini, ventral aspect: **A**–**B**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Anillinus lescheni* Sokolov and Carlton; **D**—*Anillinus forthoodensis* Sokolov and Reddell; **E**—*Geocharidius jalapensis* Sokolov and Kavanaugh; **F**—*Zeanillus pallidus* (Broun); **G**—*Pelodiaetodes insularis* Sokolov; **H**—*Pelodiaetodes nunni* Sokolov; **I**—*Pelodiaetus sulcatipennis* Jeannel. Legend: mes—mesanepisternum, mscx—mesocoxa, msts—mesothoracic anapleural suture, msv—mesoventrite, mtcx—metacoxal, mtp—metaventral process, mtv—metaventrite. Scale = 0.1 mm.

Structure of protibia. The members of Nesamblyopina exhibit an obliquely sloped apicolateral edge of the protibia. On the posterior surface of the protibia, there is a row of 4–6 setae (Figs 7A–B, psr) that are positioned adjacent to the edge and do not protrude beyond the slope edge (plesiomorphic state). This row is equivalent to the "distal cluster" of Hlavac (p. 52, Fig. 3, DC, abbreviations on p. 65 (1971) and the erroneously cited "distal comb" in Maddison *et al.* (2019). All other anillines with a documented protibial structure have an apicolateral edge of the protibia with a notch that varies in the degree of concavity. This notch is associated with a row of 9–15 setae on the posterior surface, which protrudes beyond the edge of concavity, thus forming a kind of "comb" on the protibial apex (derived state) (cf. Figs 7C–H with Figs 7A–B, psr).

Male genitalia. The symmetry/equality of the basal lobes of the median lobe of males is considered to be a synapomorphy of Anillini. However, within the tribe, many taxa actually demonstrate unequal basal lobes. This character state may characterize either whole genera or a particular species (e.g., cf. images of male median lobe of *Serranillus* in Sokolov & Carlton (2012), of *Geocharidius* in Sokolov & Kavanaugh (2014), of *Zapotecanillus* Sokolov in Sokolov (2013), of *Anillinus aleyae* Sokolov & Watrous in Sokolov & Watrous (2008), and of *A. robisoni* Sokolov & Carlton in Sokolov *et al.* (2004)) and likely evolved independently in different taxa of Anillini, including Nesamblyopina.

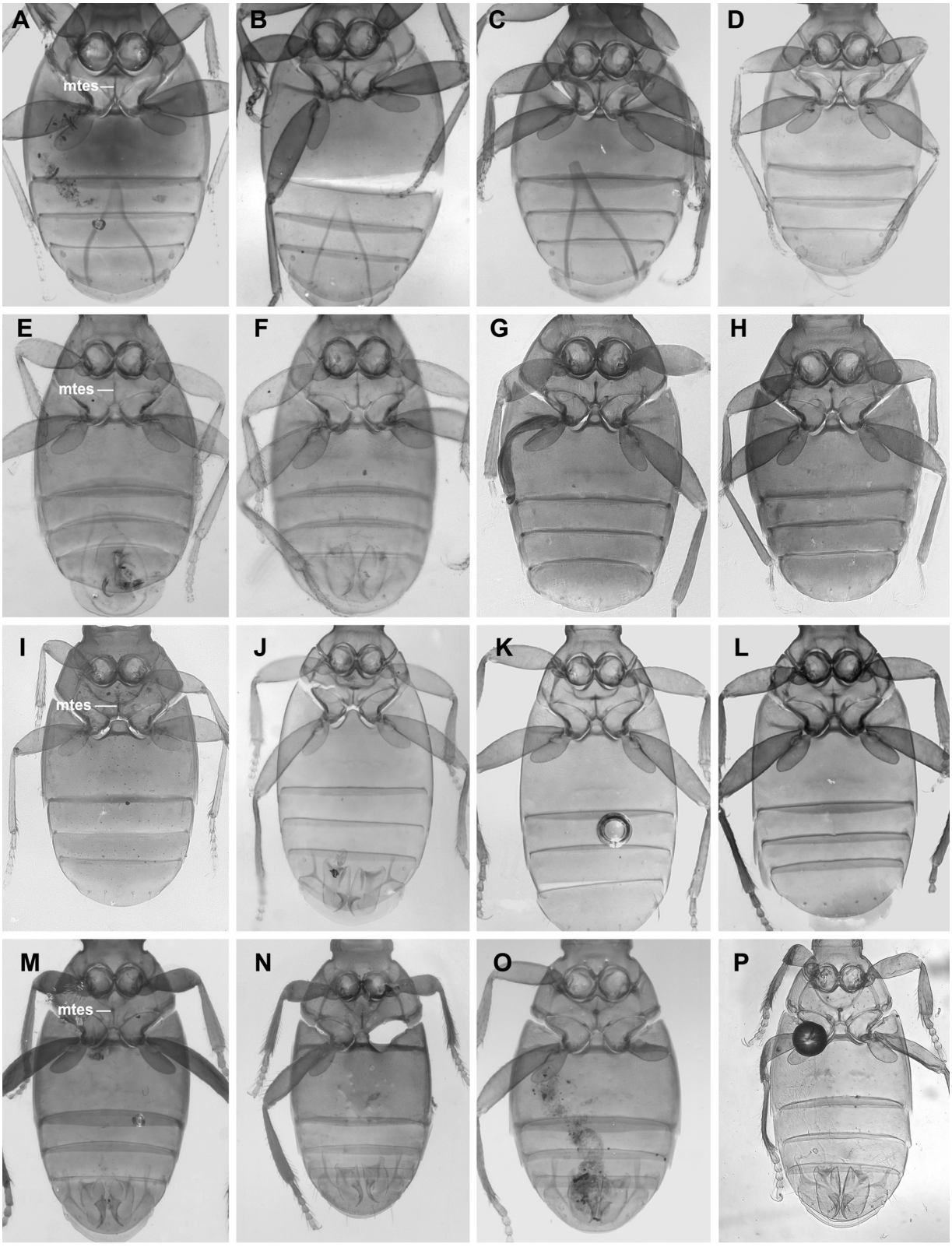

FIGURE 5. Digital illustrations of structural features of pterothorax of Anillini, ventral aspect: **A**–**D**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Nesamblyops brouni* Sokolov; **D**—*Nesamblyops viator* **n.sp.**; **E**—*Anillinus langdoni* Sokolov and Carlton; **F**—*Anillinus Cherokee* Sokolov and Carlton; **G**—*Geocharidius longinoi* Sokolov and Kavanaugh; **H**—*Geocharidius disjunctus* Sokolov and Kavanaugh; **I**—*Zapotecanillus longinoi* Sokolov; **J**—*Zeanillus pellucidus* Sokolov; **K**—*Zeanillus pallidus* (Broun); **L**—*Zeanillus nunni* Sokolov; **M**—*Pelodiaetodes insularis* Sokolov; **N**—*Pelodiaetodes nunni* Sokolov; **O**—*Pelodiaetodes moorei* Sokolov; **P**—*Pelodiaetus sulcatipennis* Jeannel. Legend: mtes—metendosternite. Scales intentionally omitted.

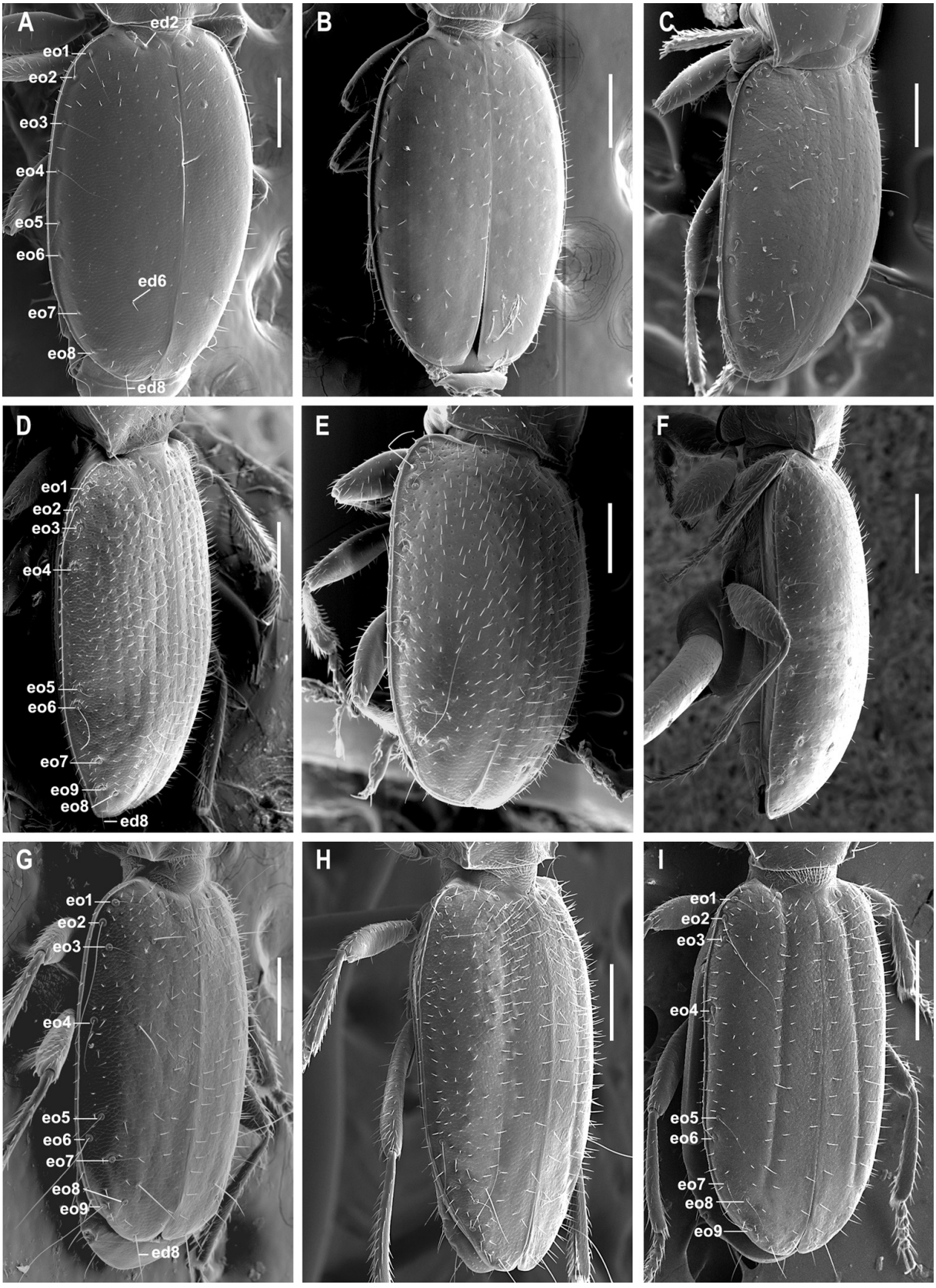

FIGURE 6. SEM illustrations of structural features of elytra of Anillini, left lateral aspect: **A**–**B**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Anillinus carolinae* Casey; **D**—*Anillinus alleni* Sokolov and Carlton; **E**—*Serranillus donovani* (Jeannel); **F**—*Geocharidius jalapensis* Sokolov and Kavanaugh; **G**—*Zeanillus punctigerus* (Broun); **H**—*Pelodiaetodes nunni* Sokolov; **I**—*Pelodiaetus nunni* Sokolov. Legend: ed2—scutellar seta; ed6—discal seta, ed8—apical seta; eo1…eo9—setae 1–9 of umbilical series of pores. Scale = 0.2 mm.

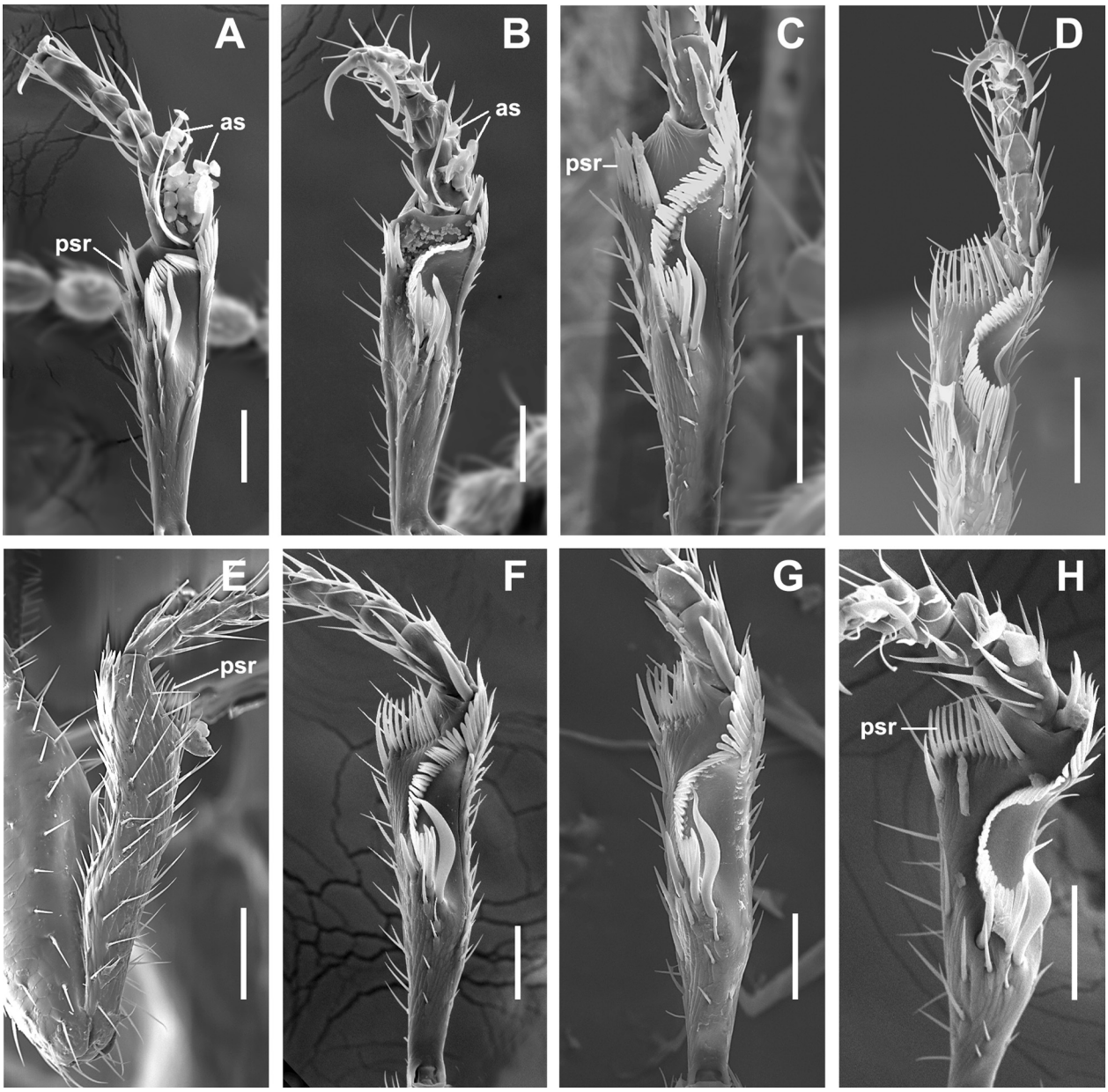

FIGURE 7. SEM illustrations of structural features of protibia of Anillini, dorsal (E) and ventral (**A**–**D**, **F**–**H**) aspects: **A**–**B**—subtribe Nesamblyopina; **A**—*Nesamblyops oreobius* (Broun); **B**—*Nesamblyops subcaecus* (Sharp); **C**—*Anillinus lescheni* Sokolov and Carlton; **D**—*Geocharidius comayaguanus* Sokolov and Kavanaugh; **E**—*Geocharidius zullini* Vigna Taglianti; **F**—*Zeanillus brouni* Sokolov; **G**—*Pelodiaetodes nunni* Sokolov; **H**—*Pelodiaetus sulcatipennis* Jeannel. Legend: as—articulo-setae; psr—posterior setal row. Scale = 0.05 mm.

Setation of ovipositor. The members of Nesamblyopina have ovipositor with three ensiform setae, represented by one medial and two lateral setae (Figs 4A–B, les1–2, mes). This state of ovipositor is not known in other species of Anillini. The representatives of the subtribes Anillina and Scotodipnina, in which female genitalia are documented, have only two ensiform setae on the ovipositor, of which one is in a lateral position and the other is in a medial position (cf. Figs 8C–F, les1, mes, with Figs 4A–B, les1–2, mes). Members of the subtribe Typhlocharina demonstrate variations in the number of ensiform setae from 0 to 1. These cases of variation occur in parallel to the changes in shape of gonocoxite 2, which varies in the representatives of Typhlocharina from the typical unguiform to a unique tubular shape (Perez-Gonzales & Zaballos 2012; Perez-Gonzales *et al.* 2018).

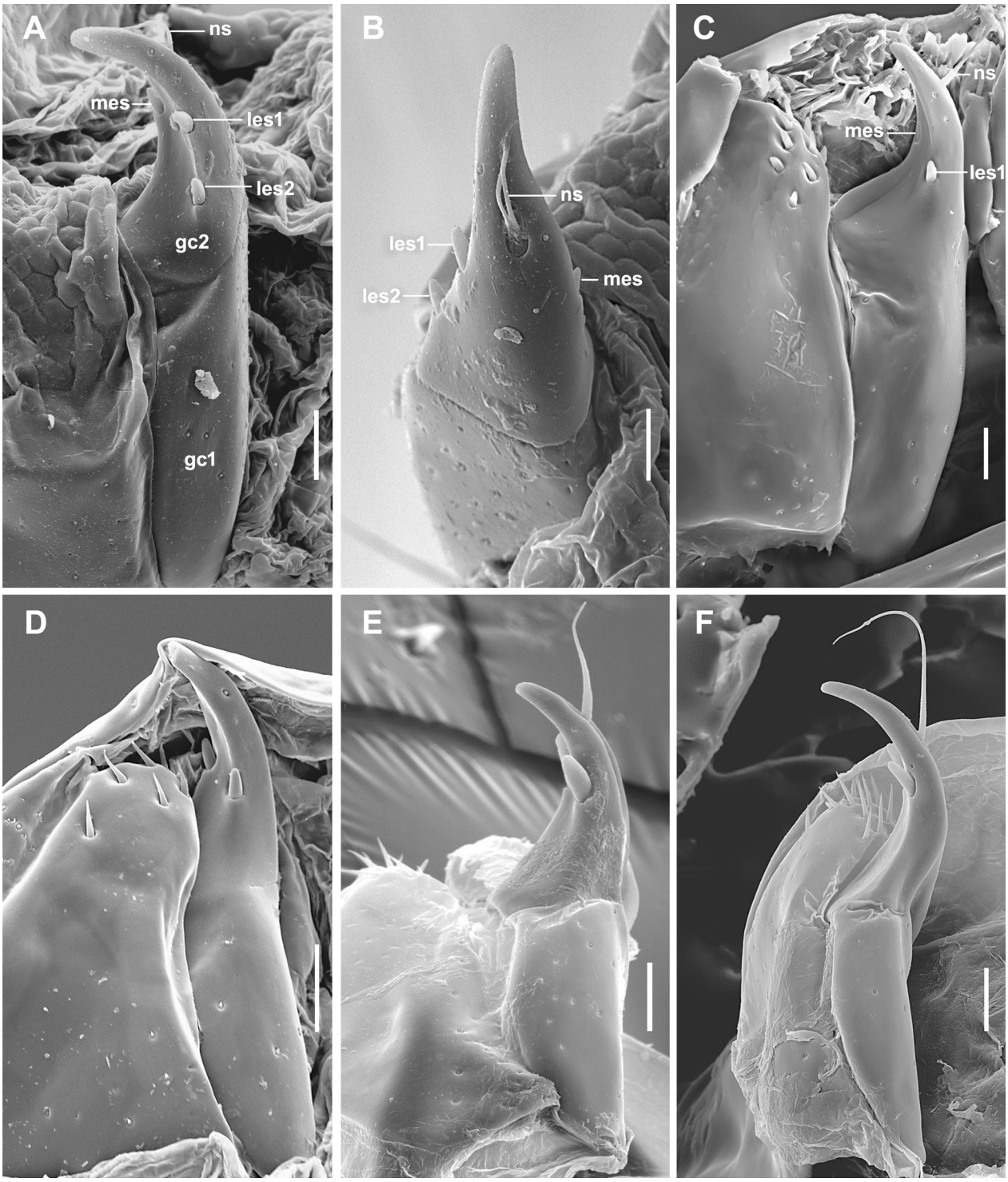

FIGURE 8. SEM illustrations of ovipositor sclerites of Anillini, lateral (**A**, **C**–**F**) and ventral (**B**) aspects: **A**–**B**—subtribe Nesamblyopina; **A**—*Nesamblyops brouni* Sokolov, **B**—*Nesamblyops brouni* Sokolov; **C**—*Anillinus lescheni* Sokolov and Carlton; **D**—*Geocharidius longinoi* Sokolov and Kavanaugh; **E**—*Pelodiaetodes moorei* Sokolov; **F**—*Pelodiaetodes nunni* Sokolov. Legend: gc1—gonocoxite 1; gc2—gonocoxite 2; les1-2—lateral ensiform setae 1 and 2; mes—medial ensiform seta; ns—nematiform setae. Scale = 0.02 mm.

Relationships outside Anillini. As described above, a certain number of characters indicative for the subtribe have not yet been documented for the species of the tribe Anillini. To determine how widely such characters are distributed among the representatives of Trechinae, especially within taxa from the sister clades to the Anillini clade on the phylogenetic tree of Trechinae (Maddison *et al.* 2019), members of the genera of Sinozolini, Zolini,

Bembidiini and of both subtribes of Tachyini (i.e., Tachyina and Xystosomina) were examined. Results of this investigation are presented in Table 1. The results show that character states indicative for the new subtribe are widely distributed among the examined non-anilline genera and can thus be interpreted as plesiomorphic. Especially amazing is the concordance in character states between Nesamblyopina and the species of the genus *Xystosomus* Schaum (Xystosomina, Tachyini). The members of Nesamblyopina share the states of seven from nine characters shown in Table 1 with the species of the genus *Xystosomus*, while the other representatives of Anillini shown in Table 1 share at most the state of only one character with the members of Nesamblyopina. Nevertheless, because of the paucity of detailed morphological descriptions for many genera of Anillini in particular and Trechinae in general, additional morphological investigations are necessary to elucidate the relationships between Nesamblyopina and other basal taxa of Trechinae.

By considering all comparative morphological data, it seems reasonable to state that the new subtribe is characterized by a combination of mostly plesiomorphic traits, pointing out that Nesamblyopina constitutes presumably an ancient relic lineage within Anillini. This assumption is in concordance with the basal position of the *Nesamblyops* clade on the phylogenetic tree of Anillini obtained in molecular analyses (Andujar *et al.* 2016; Maddison *et al.* 2019).

At this time, the new subtribe includes one genus.

Nesamblyops Jeannel 1937: 279.

With character states of the subtribe and following combination of additional diagnostic characters:

Fixed setae. Primary head setae include a pair of clypeal, a pair of frontal, and two pairs of supraorbital setae. Postorbital setae lacking. Mentum with two pairs of long primary (paramedial and lateral) setae. Pronotum with two long primary lateral setae (midlateral and basilateral) on each side. Elytra with eight setae in umbilical series of pores, one pair of discal setae in ed6 position (Figs 6A–B, ed6), with scutellar (ed2) and apical (ed8) setae.

Head. Anterior margin of clypeus (cl) straight. Clypeal "setulation" regular, consists of two pairs of setulae: one lateral (lse) and 1 apical (mse) on each side (Figs 1A–B). Apical setulae situated at the margin of clypeus close to its anterior angles. Frontal area flat without tubercle medially near frontoclypeal suture. Fronto-lateral carinae distinct and long.

Comments. The pattern of distribution of setulae ("setulation") on clypeus might be of taxonomic importance in Anillini. Patterns can be irregular (small setulae randomly scattered across the clypeus) or regular (a few relatively long setulae whose positions follow bilateral symmetry). In the latter case, the position of particular setula is also important (at the edge or shifted interior to the middle of clypeus). Altogether, the pattern and positions of setulae may characterize lineages or groups of genera (cf. the irregular pattern of related *Anillinus* and *Serranillus* (not illustrated) in Fig. 1D with the regular pattern of related *Pelodiaetodes* Moore and *Pelodiaetus* Jeannel with setulae in mid-clypeal positions, Figs 1H–I), certain genera (the irregular pattern of *Zeanillus* Jeannel, Fig. 1G, with the regular pattern of *Geocharidius* with setulae in mid-clypeal positions, Fig. 1F), or particular species—some species of *Geocharidius* have mid-clypeal setulae even longer than fixed clypeal setae, thus having four long setae on clypeus like *Bembidarenas* Erwin and *Tasmanitachoides* Erwin of Bembidarenini (Maddison *et al.* 2019).

Eyes. Each eye is either presented by one ommatidium with supported black pigment underneath or eyes absent (Figs 1A–C, om, trom).

Antennae. From filiform to submoniliform, 11-segmented, extended to about posterior margin of pronotum.

Labrum. Labrum transverse and straight, entire anterior margin with six setae apically, increasing in size from the central pair outwards.

Labium. Labium with short acute mental tooth and acute epilobes, mentum and submentum split, with mental-submental suture. Glossal sclerite with shortly lobed paraglossae with two setae medio-apically.

Prothorax (Figs 3A–B). Pronotum cordiform, moderately convex, rectilinear constricted posteriorly, with narrow marginal gutter. Posterior margin of pronotum varies from rectilinear to slightly convex. Anterior angles wanted. Posterior angles rounded, nearly effaced, bearing basolateral seta at or far anterior to angles.

Elytra (Figs 6A–B). Elytra slightly subdepressed along suture, without visible interneurs and without longitudinal grooves. Humeri rounded, to form oblique angle with longitudinal axis of body. Elytral basal margination lacking. Apical half of elytra without subapical sinuation. Sutural angle of elytron shortly rounded, making apices of elytra very slightly dehiscent.

Hind wings. Absent.

Legs. Legs of moderate length, not elongate. Prothoracic legs of males with first two tarsomeres dilated apico-laterally with 1–3 rows of oval articulo-setae (as) (Stork 1980) on the ventral surface (Figs 7A–B).

Abdominal ventrites (Figs 5A–D). Five visible abdominal ventrites: 2nd ventrite longest, 2.8–3.5 times longer than 3rd or 4th, 3rd and 4th equal in length; the last, 5th, 1.4–1.6 times longer than 4th. Abdomen with intercoxal process of the ventrite 2 of an acute triangular shape.

Male genitalia (Figs 14–16). Median lobe of aedeagus anopic, elongate, slightly twisted and moderately arcuate. Apex of median lobe various, often with enlarged tip. Copulatory sclerites of median lobe characterized by weak development of sclerotization and heavily sclerotized only narrowly, presumably along folds or invaginations of the internal sac. In the most common case, weakly sclerotized fields of copulatory sclerites are observed in lateral view as one formation at basal half of the shaft. Typically, two components of this formation are more conspicuous than others, and can be seen in many species. The first component, more dorsal in position, is represented by few elongate and strongly sclerotized structures forming an isosceles triangle, which stretches along the longitudinal axis of the shaft. Congruent sides of this triangle directed apically and, thus, forming a V-shaped contour (further V-contour, Fig. 14L, Vc). The second component, more medial in position, is represented by a weakly to moderately sclerotized field with a narrowly and strongly sclerotized edge having the reversed C-contour (further rC-sclerite, Fig. 14L, rCs). Both components vary in their relative sizes, proportions, and degree of sclerotization giving a particular species a unique pattern of sclerotized contours. In some cases, components are merged and form species specific plates. Some species have only one sclerotized field: in these cases, presumably the rC-sclerite is lacking. Finally, some species develop additional sclerotized structures in apical half of the shaft. Spines of internal sac absent in all examined species. Parameres tri- or bisetose. Ring sclerites trianguloid with an ovoid basal part, either acute or rounded handle-like extension varying in length among species.

Female internal genitalia (Fig. 18). Spermatheca sclerotized, in a form of the light bulb shape, with ball-like distal part and tube-like proximal part representing the continuation of the unsclerotized and short spermathecal duct. Proximal part of spermatheca bears a long spermathecal gland. Both gland and duct slightly longer than the length of spermatheca.

Geographical distribution. Endemic of New Zealand including the Antipodes Islands.

Included taxa. At present the genus includes 24 species, fourteen of which are described below.

***Nesamblyops canaanensis*, sp. nov.**

Figures. 9A, 12A, 14A–C, 17A, 19

Type material. ***HOLOTYPE***, male, in NZAC, labeled: Canaan Nel. 13.4.66 J.I. Townsend 66/137 \ forest litter \ Duplicate adults in alcohol \ DSIR \ No \ NZ PB \. ***PARATYPES*** (38 specimens mounted on boards and uncounted numerous specimens in two plastic capsules, in NZAC, dissected 11 exx.), 4 males and 8 females labeled same as holotype; 2 males labeled: \ 2 Heaphy Track 304m Nelson \ Litter 67/236 \ 22 Aug. 67 F. Alack \ DSIR \ Ns \ NZ PB \; 1 male labeled: \ Leamould \ Aorere Valley 18-4-63 Forest J.I. Townsend \ NZ PB \; 1 male and 2 females labeled: \ PuPu Valley 21.v.67 F.Alack \ litter 67/204 \ DSIR \ No \ NZ PB \; 1 male labeled: \ Wetmoss in depression The Parklands Canaan 4.2.65 L.P. Marchaut \ NZ PB \; 1 male labeled: \ Bainham Nel.Dist. Brown Cow Ridge 3500' 27.10.65 A.K.Walker \ moss, forest of Dracophyllum 65/541 \ DSIR \ No \; 1 male labeled: \ Litter Parapara Golden Bay 18.11.72 J.I. Townsend \ J.I. Townsend Collection \; 1 male: \ Canaan side Canaan Sdle. \ 2800' 27.ii.67 Takaka Hill J.I. Townsend \ moss sample 67/92 \ DSIR \ No \ NZ PB \; numerous specimens in plastic capsule: \ Canaan Nel. 4-2-65 litter L.P. Marchaut \ DSIR \ No \ NZ PB \; 3 males and 1 female labeled: \ Canaan Nelson litter Harwood Track 17.9.64 L.P. Marchaut \ NZ PB \; 1 female labeled: \ Canaan Nelson 550m 27 Feb 67 J.I. Townsend \ moss 67/92 \ NZ PB \; 1 female labeled: \ NEW ZEALAND NN Ramekat Canaan 18 Apr 1966 J.I.Townsend \ Polytrichum moss 66/139 \ teneral \ NZ PB \; 1 male labeled: \ NEW ZEALAND NN Canaan 18 Apr 1966 J.I.Townsend litter 66/137 \ Pselaphidae \ NZ PB \; numerous specimens in plastic capsule: \ *N menziesii* litter Canaan Nelson 3-3-64 \ J.I. Townsend \ DSIR\ No \ NZ PB \; 2 females labeled: \ Canaan Takaka Hill Harwood Track 17.9.64 litter L.P. Marchaut \ NZ PB \; 1 male labeled: \ Canaan Takaka 17.9.64 litter L.P. Marchaut \ NZ PB \; 1 male labeled: \ Takaka Hill 2600' 2.4.65 moss sple A.K.Walker 65/295 \ NZ PB \; 1 male and 1 female labeled: \ Takaka Hill, 2000' 7-2-57 (c) E.S.Gourlay \ DSIR\ No \ NZ PB \; 1 male and 1 female labeled: \ Takaka Hill Nel.

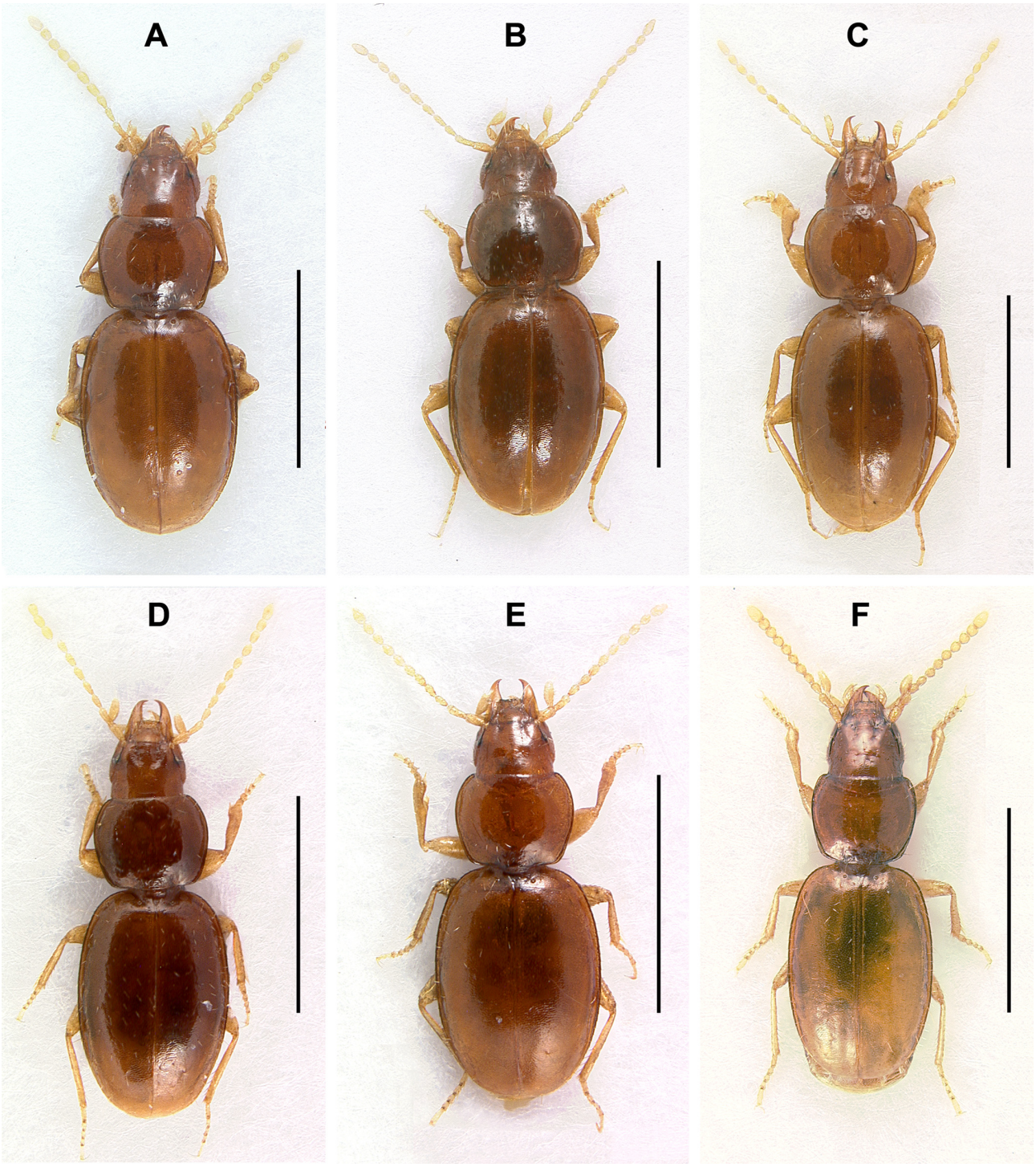

FIGURE 9. Digital images of habitus of New Zealand *Nesamblyops* species, dorsal aspect. **A**—*N. canaanensis* (Canaan, Nelson, SO), **B**—*N. disjunctus* (Fletchers Creek, Buller, SO), **C**—*N. hobbit* (9mi. N Karamea, Nelson, SO), **D**—*N. karamea* (Karamea River Gorge, Nelson, SO), **E**—*N. kuscheli* (Flora Hut, Mount Arthur, Nelson, SO), **F**—*N. magnificus* (Allison Reserve, Akatore, Dunedin, SO). Scale bar = 1.0 mm.

18.iv.63 G.Kuschel \ Nothofagus litter 63/8 \ NZ PB \; 1 female labeled: \ Riwaka Val. NN Sept. 70 J.S. Dugsdale \ Melicytus litter \ NZ PB \.

Etymology. The specific epithet is a Latinized adjective in the masculine form based on the name of the Canaan area in which the type series was collected.

Type locality. New Zealand, South Island, Nelson, Abel Tasman National Park, Canaan area.

Recognition. Adults of this species (Fig. 1A) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (cf. with Figs 1C, E) and are distinguished from them by the structure of the male genitalia.

Description. Large for genus (SBL range 1.71–2.09 mm, mean 1.88±0.099 mm, n=21).

Habitus. Body form (Fig. 9A) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.41±0.010), head narrow relative to pronotum (WH/WPm 0.67±0.015), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.75±0.015).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12A) moderately long in comparison to elytra (LP/LE 0.43±0.016) and moderately transverse (WPm/LP 1.25±0.027), with lateral margins rectilinear constricted posteriorly (WPm/WPp 1.31±0.057). Anterior angles indistinct, posterior angles obtuse (105–119°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.87±0.038). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.58±0.008) and moderately wide (WE/LE 0.71±0.019). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 14C) moderately arcuate and moderately twisted. Shaft subparallel basally, tapering in apical half. Apex slightly upturned with small rounded tip. Apical orifice long, occupies almost half of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft with few poriferous canals near basal orifice. Dorsal copulatory sclerites with greatly reduced V-contour and rC-sclerite of moderate size (Fig. 14C). Left paramere (Fig. 14A) comparatively wide, with attenuate apex, bearing three long setae. Right paramere (Fig. 14B) of moderate length, bearing three long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17A.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies the northwest corner of the South Island and lies mostly within the northern part of the Kahurangi National Park stretching from the Saxon River at the northwest to the Takaka Hills at the northeast of Tasman District (Fig. 19, green circles).

Habitat. Specimens were collected mostly from moss samples (labels mention hairy cup *Polytrichum* moss), as well from forest litter in *Dracophyllum*, *Melicytus* and *Nothofagus* forests (labels mention silver *N. menziesii* beech).

Relationships. The structure of the male genitalia of *N. canaanensis* suggests its relatedness to the species with trisetose parameres and well-developed rC-sclerite with small V-contour in the internal sac of median lobe, such as *N. hobbit* and *N. ovipennis*, described below.

***Nesamblyops disjunctus*, sp. nov.**

Figures. 9B, 12B, 14D–F, 17B, 22

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ NEW ZEALAND BR Fletchers Creek 6km SW of Rotokohu Biological Res. \ 9 Nov 1971 J.S. Dugdale Litter 71/129 \ Beech Forest Utilization Project \ NZ PB \. ***PARATYPES*** (11 specimens, dissected 4 exx.), 2 males and 3 females labeled same as holotype; 3 females labeled: \ NEW ZEALAND BR 6km SW of Rotokohu 25 Jan 1972 J.S. Dugdale \ XPB4 Litter 72/99 \ NZ PB \; 1 female labeled: \ Inangahua Buller district litter 25.11.61 J.I. Townsend \ DSIR \ No \ NZ PB \; 1 male and 1 female labeled: \ Inangahua 25.11.61 litter J.I. Townsend \ DSIR \ No \ NZ PB \.

Additional material: 1 male and 1 female labeled: \ Reef Pt Antipodes I. 28 Feb 69 G. Kuschel \ 69/70 Litter \ moss \ NZ PB \.

Etymology. The specific epithet is a Latin adjective, *disjunctus* (meaning "separated, disjoined"), in the masculine form, and refers to the geographical distribution of this species, which is characterized by an amazing disjunction.

Type locality. New Zealand, South Island, West Coast, E slope of the Paparoa Range, Fletcher Creek area.

Recognition. Adults of this species (Fig. 9B) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 9C, 10C, 11C) and are distinguished from them by the structures of the male genitalia.

Description. Large for genus (SBL range 1.81–1.95 mm, mean 1.88±0.042 mm, n=12).

Habitus. Body form (Fig. 9B) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.41±0.006), head narrow relative to pronotum (WH/WPm 0.67±0.016), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.75±0.020).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12B) moderately long in comparison to elytra (LP/LE 0.43±0.013) and moderately transverse (WPm/LP 1.24±0.029), with lateral margins arcuately constricted posteriorly (WPm/WPp 1.27±0.048). Anterior angles indistinct, posterior angles obtuse (105–114°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.85±0.040). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.58±0.008) and moderately wide (WE/LE 0.70±0.014). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 14F) slightly arcuate and moderately twisted. Shaft subparallel part of the length, tapering in apical third. Apex moderately curved dorsally with a small rounded tip. Apical orifice of moderate length, occupies less than half of the shaft length. Ventral margin of median lobe mostly straight, in apical third slightly dilated, next obliquely going up to apex. Walls of shaft with group poriferous canals near basal orifice. Dorsal copulatory sclerite composed of rC-sclerite with almost straight marginal sclerotization, moderately long V-contour, and curved lanceolate plate situated apico-ventrally from rC-sclerite (Fig. 14F). Left paramere (Fig. 14D) comparatively wide, with shortly attenuate apex, bearing three long setae. Right paramere (Fig. 14E) short, bearing three long setae, which are approximately equal the length of paramere. Ring sclerite as in Fig. 17B.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies two distant areas. First area includes the eastern slopes of the Paparoa Range between Inangahua and Rotokohu of the West Coast region, South Island. Second area is confined to Antipodes Island, lying 600 miles to the southeast of New Zealand (Fig. 22, red circles).

Habitat. Specimens from mainland were collected in litter without more detailed data, specimens from Antipodes Island were taken in a moss sample.

Relationships. The structure of the male genitalia of *N. disjunctus* suggests its close relatedness to *N. victoriae*, described below. Both species form a small and distinctive group.

***Nesamblyops hobbit*, sp. nov.**

Figures. 9C, 12C, 14G–I, 17C, 19

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ Mt.Domett 1000m 1 Dec 71 G.W.Ramsay \ Litter 71/176 \ DSIR \ No \ NZ PB \. ***PARATYPES*** (30 specimens, dissected 5 exx.), 6 males and 6 females labeled same as holotype; 1 male and 3 females labeled: \ Mt.Domett 1463m 1 Dec 71 J.S. Dugdale \ mat plants 71/181 \ DSIR \ No \ NZ PB \; 2 males and 2 females labeled: \ Mt.Domett 1250m Nov-Dec 71 G.Kuschel \ moss 71/169 \ DSIR \ No \ NZ PB \; 2 females labeled: \ MtDomett NN 1000m 1 Dec 71 G.W. Ramasay \ Litter 71/176 \ NZ PB \; 1 male labeled: \ L.Aorere 914m NN Mt.Domett Nov 71 \ J. McBurney \ moss 71/165 \ DSIR \ No \ NZ PB \; 6 males and 1 female labeled: \ 9 miles N. Karamea \ 1200' 20.vi.67 F.Alack \ litter 67/217 \ DSIR\ No \ NZ PB\.

Etymology. The specific epithet is a noun in apposition in the nominative case based on the imaginary race of people in the novel of J. R. R. Tolkien "The Hobbit", and refers to this species's way of life.

Type locality. New Zealand, South Island, Nelson, Kahurangi National Park, Mt Domett.

Recognition. Adults of this species (Fig. 9C) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 9A, 10C) and are distinguished from them by the structures of the male genitalia.

Description. Large for genus (SBL range 1.97–2.19 mm, mean 2.09±0.082 mm, n=16).

Habitus. Body form (Fig. 9C) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.40±0.009), head narrow relative to pronotum (WH/WPm 0.66±0.028), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.75±0.018).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12C) moderately long in comparison to elytra (LP/LE 0.42±0.010) and moderately

transverse (WPm/LP 1.22±0.035), with lateral margins arcuately constricted posteriorly (WPm/WPp 1.30±0.026). Anterior angles indistinct, posterior angles obtuse (109–117°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.86±0.029). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.59±0.005) and moderately wide (WE/LE 0.68±0.015). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 14I) moderately arcuate and moderately twisted. Shaft subparallel basally, tapering in apical half. Apex almost straight with narrowly rounded tip. Apical orifice long, occupies almost half of the shaft length. Ventral margin of median lobe straight. Walls of shaft with a number of poriferous canals scattered along ventral margin. Dorsal copulatory sclerites with well-developed rC-sclerite and reduced V-contour with short dorsal branch slightly protruding toward basal orifice (Fig. 14I). Left paramere (Fig. 14G) comparatively wide, with attenuate apex, bearing three long setae. Right paramere (Fig. 14H) long and narrow, bearing three long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17C.

Female internal genitalia. Not examined.

Geographical distribution. The species inhabits the central-western part of the Kahurangi National Park with a range stretching from the catchment of the Aorere River at the northeast to the northernmost parts of the West Coast District, South Island (Fig. 19, black circles).

Habitat. Specimens were collected from moss, mat plants, and litter samples.

Relationships. The structure of the male genitalia of *N. hobbit* suggests its relatedness to the other species with trisetose parameres, a well-developed rC-sclerite with small V-contour in the internal sac of median lobe, such as *N. canaanensis* and *N. ovipennis*, described below.

***Nesamblyops karamea*, sp. nov.**

Figures. 9D, 12D, 14J–L, 17D, 19

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ Karamea River Gorge. F.Alack 24.vi.67 \ litter 67/216 \ DSIR \ No \ NZ PB \. ***PARATYPES*** (9 specimens, dissected 2 exx.), 1 male and 2 females labeled same as holotype; 2 males labeled: \ Karamea Val. F.Alack 21.vi.67 \ litter 67/218 \ DSIR \ No \ NZ PB \; 1 male and 3 females labeled: \ 6m. up Little Wanganui R. West Nelson. \ F.Alack 24.vi.67 \ litter 67/211 \ DSIR \ No \ NZ PB \.

Etymology. The specific epithet is a noun in apposition in the nominative case and refers to the name of the river gorge from which the new species is described.

Type locality. New Zealand, South Island, West Coast, Kahurangi National Park, the Karamea River Gorge area.

Recognition. Adults of this species (Fig. 9D) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 9C, 10C) and are distinguished from them by the structures of the male genitalia.

Description. Of moderate size for genus (SBL range 1.67–1.91 mm, mean 1.79±0.076 mm, n=9).

Habitus. Body form (Fig. 9D) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.40±0.010), head narrow relative to pronotum (WH/WPm 0.68±0.015), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.75±0.013).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12D) moderately long in comparison to elytra (LP/LE 0.42±0.010) and moderately transverse (WPm/LP 1.22±0.024), with lateral margins arcuately constricted posteriorly (WPm/WPp 1.31±0.049). Anterior angles indistinct, posterior angles obtuse (107–119°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.89±0.027). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.59±0.007) and moderately wide (WE/LE 0.68±0.020). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 14L) moderately arcuate and moderately twisted. Shaft short, convex dorsally, tapering in apical half. Apex moderately curved dorsally with rounded tip. Apical orifice long, occupies almost half of the shaft length. Ventral margin of median lobe straight. Walls of shaft without poriferous

canals. Dorsal copulatory sclerites with well-developed rC-sclerite and with moderately long V-contour (Fig. 14L). Additionally, internal sac possesses curved narrowly sclerotized fold apico-ventrally from rC-sclerite. Left paramere (Fig. 14J) comparatively narrow, with slightly tapering apex, bearing three long setae. Right paramere (Fig. 14K) of moderate length, bearing three long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17D.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies the northern part of the West Coast presumably between the Karamea and the Wanganui Rivers (Fig. 19, yellow circles).

Habitat. Specimens were collected from litter samples.

Relationships. The structure of the male genitalia of *N. karamea* suggests its relatedness to the other species with well-developed rC-sclerite and V-contour in the internal sac of the median lobe (cf. with the sclerites of *N. carltoni*, Fig. 5F, p. 190, Sokolov 2023). However, some details in the internal sac such as a presence of additional curved sclerotized fold apico-ventrally point out on isolated position of *N. karamea* within the genus. Taking in account the trisetose parameres and a shape of median lobe this species may have a remote relatedness to the group of species, which includes *N. canaanensis*, *N. hobbit*, and *N. ovipennis*.

Nesamblyops kuscheli, sp. nov.

Figures. 9E, 12E, 14M–O, 17E, 19

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ Flora Hut 2500' 4-2-65 Mt.Arthur moss G.Kuschel \ DSIR \ No \ NZ PB \. ***PARATYPES*** (14 specimens, dissected 4 exx.), 4 males and 2 females labeled same as holotype; 1 female labeled: \ Damp stream bed S. of Flora Hut. Mt.Arthur NELSON 12 Nov 69 J.I. Townsend \ NZ PB \; 2 males and 3 females labeled: \ Flora Mt.Arthur 3-2-65 moss G.Kuschel \ DSIR \ No \ NZ PB \; 1 female labeled: \ Flora Track 1066m Mt.Arthur Nelson \ 16 Nov 69 B.M. May \ Litter 66/221 \ NZ PB \; 1 male labeled: \ Flora Tr. 1005m Mt.Arthur Nelson 20 Nov 69 S.M.Silcock \ Litter 69/231 \ NZ PB \.

Etymology. The specific epithet is a Latinized eponym in the genitive case and is based on the surname of Guillermo (Willy) Kuschel, a recognized New Zealand entomologist of Chilean origin, and a world specialist in weevils, who made an incredible contribution to the knowledge of the beetle fauna of the Southern Hemisphere, particularly the fauna of New Zealand.

Type locality. New Zealand, South Island, Nelson, Kahurangi National Park, Mount Arthur.

Recognition. Adults of this species (Fig. 9E) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs. 9A–B, 10C) and are distinguished from them by the structures of the male genitalia.

Description. Of medium size for genus (SBL range 1.65–1.85 mm, mean 1.74±0.059 mm, n=14).

Habitus. Body form (Fig. 9E) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.41±0.009), head narrow relative to pronotum (WH/WPm 0.70±0.014), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.73±0.016).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12E) moderately long in comparison to elytra (LP/LE 0.41±0.008) and moderately transverse (WPm/LP 1.27±0.017), with lateral margins arcuately constricted posteriorly (WPm/WPp 1.31±0.030). Anterior angles indistinct, posterior angles obtuse (112–119°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.91±0.020). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.59±0.003) and moderately wide (WE/LE 0.71±0.015). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 14O) moderately arcuate and moderately twisted. Shaft subparallel, tapering in apical third. Apex straight with rounded tip. Apical orifice of moderate length, occupies almost one-third of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft without poriferous canals. Dorsal copulatory sclerites with well-developed rC-sclerite and with reduced V-contour, dorsal branch of which protruding toward basal orifice (Fig. 14O). Left paramere (Fig. 14M) of moderate width slightly tapering to apex, bearing two long setae. Right paramere (Fig. 14N) of moderate length, bearing two long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17E.

Female internal genitalia. Not examined.

Geographical distribution. This species is known from the Mount Arthur area, South Island only (Fig. 19, red circles).

Habitat. Specimens were collected from moss and litter samples (labels mention as habitat the damp stream bed).

Relationships. The structure of the male genitalia of *N. kuscheli* suggests its relatedness to the other species with a well-developed rC-sclerite and small V-contour in the internal sac of the median lobe. Details of sclerite configurations and bisetose parameres point out on affinity of the new species to *N. moorei*, described below.

***Nesamblyops magnificus*, sp. nov.**

Figures. 9F, 12F, 14P–R, 18A, 23

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ New Zealand DN Allison Res Akatore 21 May 06 / Washing soil from forest /. ***PARATYPES*** (11 specimens, dissected 5 exx.), 1 male and 4 females labeled same as holotype; 1 male labeled: \ New Zealand DN Allison Res S of Akatore 24 Feb 01 / In earthy forest floor litter / *Zeanillus* sp. det. JTN 2/01 /; 1 female labeled: \ New Zealand DN Allison Reserve nr Akatore 9 Aug 08 / Washed soils sample near stream \; 1 male labeled: \ New Zealand-DN: Allison Reserve, Akatore, broadleaf/podocarp forest, 150m, washed soil sample, M31:602701 J.Nunn 2 Dec 2007 / Molecular voucher № 85 Sokolov I.M. 2008 \; 1 female labeled: \ Waipori Falls 1000' 15.I.65 Kuschel + Townsend \ DSIR\ Ns \ Digitally imaged May/June 2001 B.Rhode \ NZ PB \; 1 male and 1 female labeled: \ Waipori Pond Otago 8.IX.68 J.C. Watt \ Moss + Litter 68/111 \ DSIR\ Ns \ NZ PB \.

Etymology. The specific epithet is a Latin adjective, *magnificus* (meaning "splendid, rich") in the masculine form, and refers to the wonderful structure of the male median lobe.

Type locality. New Zealand, South Island, Coastal Otago, Allison Conservation Area.

Recognition. Adults of this species (Fig. 9F) can be easily distinguished from the adults of all *Nesamblyops* species by the absence of "eyes", which other species of the genus have in a diminutive state (one ommatidium with underlying pigmented spot), and by the structures of the male genitalia.

Description. Large for genus (SBL range 1.81–2.01 mm, mean 1.93±0.078 mm, n=6).

Habitus. Body form (Fig. 9F) slightly convex, elongate ovoid, general proportions moderately narrow (WE/SBL 0.37±0.009), head moderately wide relative to pronotum (WH/WPm 0.73±0.011), proportions of pronotum in comparison to elytra slightly wide for genus (WPm/WE 0.78±0.030).

Color. Body color rufotestaceous, appendages testaceous.

Prothorax. Pronotum (Fig. 12F) moderately long in comparison to elytra (LP/LE 0.42±0.014) and moderately transverse (WPm/LP 1.22±0.026), with lateral margins arcuately constricted posteriorly (WPm/WPp 1.31±0.055). Anterior angles indistinct, posterior angles strongly obtuse (124–133°), almost completely rounded. Width between posterior angles equals the width between anterior angles (WPa/WPp 0.96±0.052). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, widely depressed along suture, comparatively long (LE/SBL 0.57±0.007) and moderately narrow (WE/LE 0.65±0.019). Humeri completely rounded. Lateral margins slightly divergent at basal third, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 14R) strongly arcuate and slightly twisted. Shaft subparallel in basal half, slightly tapering in apical half towards apex. Apex straight, enlarged, with curved downward, triangular, narrowly rounded tip. Apical orifice long, occupies apical half of the shaft length. Ventral margin of median lobe slightly convex. Walls of shaft with small group of poriferous canals near basal orifice. Copulatory sclerites greatly enlarged, occupying almost half of the shaft length, though in general shape following typical design of *Nesamblyops*. Dorsal V-contour consists of moderately sclerotized fields protruding from basal orifice and prolonging apically in short spiral ribbon with acutely pointed tip. Medial rC-sclerite has elongated ventral branch with acute apical part, and distinctive exterior edge also protruding from basal orifice (Fig. 14R). Left paramere (Fig. 14P) comparatively narrow, with moderately attenuated apex, bearing two long setae. Right paramere (Fig. 14Q) short, of moderate width, bearing two long setae, which are shorter than the length of paramere. Ring sclerite not examined.

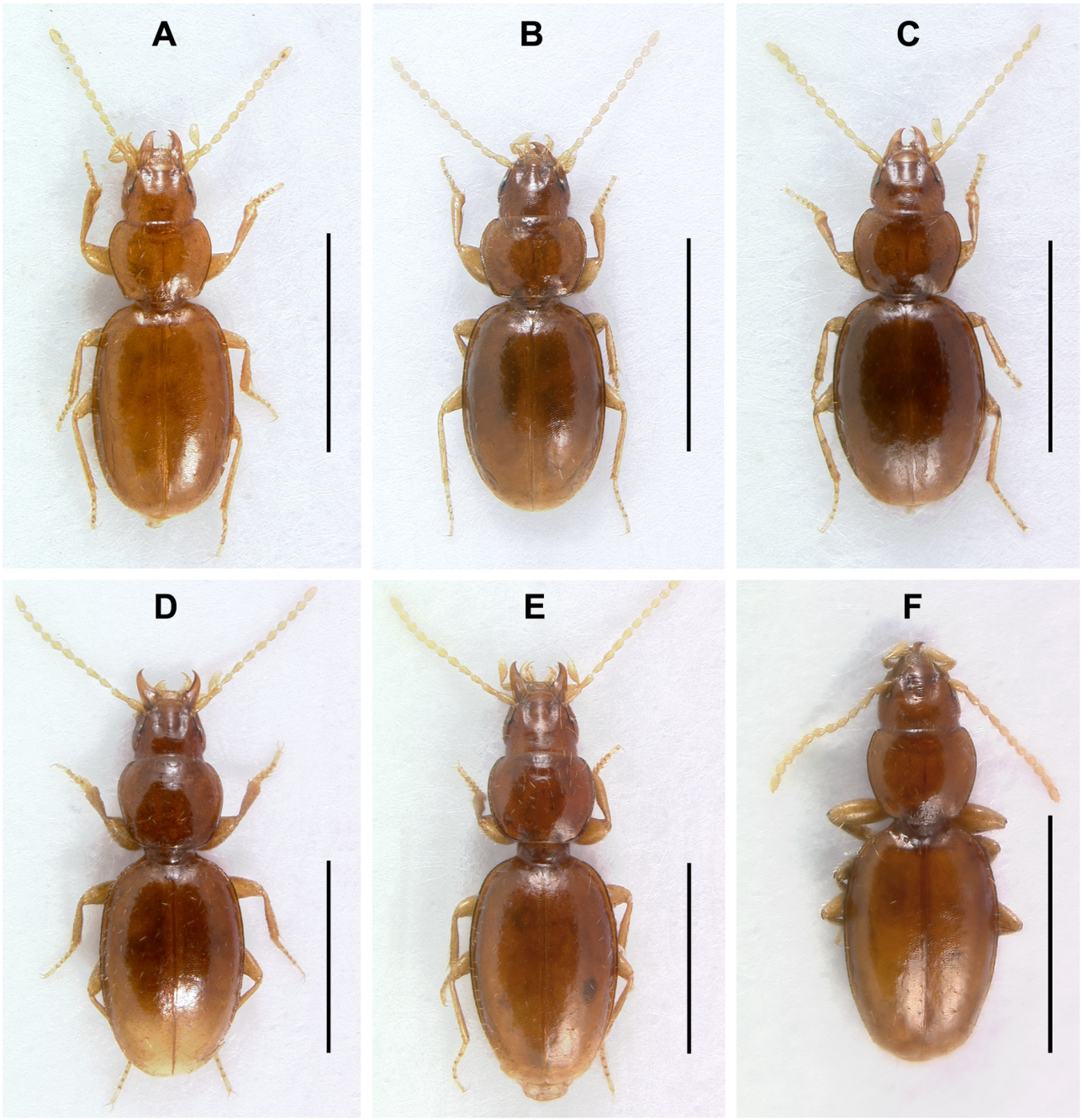

FIGURE 10. Digital images of habitus of New Zealand *Nesamblyops* species, dorsal aspect. **A**—*N. montanus* (Lake Sylvester, Kahurangi National Park, Nelson, SO), **B**—*N. moorei* (Kangaroo Creek, Mawhera Forest, Buller, SO), **C**—*N. ovipennis* (Mount Arthur, Nelson, SO), **D**—*N. rotundicollis* (Onekaka, Nelson, SO), **E**—*N. solitarius* (Italian Creek, Capleston, Buller, SO), **F**—*N. subcaecus* (Sharp) (Greymouth, Buller, SO). Scale bar = 1.0 mm.

Female internal genitalia. Spermatheca (Fig. 18A) with two sclerotized compartments, larger ball-shaped distal part, and short, tube-like part representing a sclerotized continuation of the spermathecal duct. Tube-like part bears spermathecal gland, which is longer than the length of spermatheca. Spermathecal duct short, approximately equals the length of spermathecal gland.

Geographical distribution. The range of the species situated in the southeast corner of the South Island and restricted to the territories associated with the lower course of the Taieri River (Fig. 23, red circles).

Habitat. Specimens were mostly collected using washing technique from soil samples (labels mention broadleaf/podocarp forest), few specimens were taken from moss and forest litter also.

Relationships. The structures of the male genitalia and the shape of spermatheca of *N. magnificus* suggest its

relatedness to the other species of the genus having V-contour and rC-sclerites in the internal sac of the median lobe. However, hypertrophy of the copulative sclerites makes other assumptions on the relationships of *N. magnificus* impossible. Presumably this species is a remote relative of the other species of *Nesamblyops* with bisetose parameres.

***Nesamblyops montanus*, sp. nov.**
Figures. 10A, 12G, 15A–C, 17F, 20

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ L.Sylvester 3500'. Nelson 29.x.69 J.S. Dugdale \ Litter 69/180 \ NZ PB \. ***PARATYPES*** (344 specimens, dissected 18 exx.), 13 males and females labeled same as holotype; 2 males and 2 females labeled: \ Wooded Pk. Dun Track Sdle Nelson 14 Sept. 71 \ G.Ramsay \ litter 71/109 \ DSIR\ Ns \ NZ PB \; 1 female labeled: NEW ZEALAND NN Beebys Knob 1220m 5Feb 1978 A.K. Walker \ Moss and rotten wood 78/76 \ NZ PB \; 20 males and females labeled: \ Mt.Robert above 4500' \ 15.iii.68 J. McBurney \ moss 68/90 \ DSIR\ Ns \ NZ PB \; 17 males and females labeled: \ Mt.Robert Nel. 15.III.68 J.McBurney \ Mat plant 68/91 \ DSIR\ Ns \ NZ PB \; 4 males and 4 females labeled: \ Mt.Robert 4600' 3.iv.68 J.S. Dugdale \ Mat plants 68/101 \ DSIR\ Ns \ NZ PB \; 1 female labeled: \ Mt Robert Ridge Nelson 1600m 12 Oct 69 GW Ramasay \ DSIR\ Ns \ NZ PB \; 1 female labeled: \ St. Arnaud Ra. 22.10.64 G.Kuschel \ moss in bush \ DSIR\ Ns \ NZ PB \; 2 males and 3 females labeled: \ New Zealand MB Ranbow Skifield 9-Feb-07 \ Tussock litter \; 3 males and 2 females labeled: New Zealand BR nr Relax Shelter Mt Robert Ridge Nelson Lakes NP 1-Dec-05 \ 1410m in damp tussuck litter \ *Nesamblyops* s.nov. det JTN 6/06 \; 15 males and females labeled: \ L.Sylvester 1310m. Cobb Nelson 29 Oct 69 \ J.S. Dugdale \ Litter 69/181 \ DSIR\ Ns \ NZ PB \; 60 males and females labeled: \ L.Sylvester >1300m Cobb V. NN 29 Oct 69 \ J.S. Dugdale \ mat plants 69/179 \ DSIR\ Ns \ NZ PB \; 1 male and 1 female labeled: \ L.Sylvester 1310m. NN 19 Oct 69 J.S. Dugdale \ J.S. Dugdale \ Litter 69/118 \ NZ PB \; 2 males and 2 females labeled: \ L.Sylvester 1066m. NN 19 Oct 69 J.S. Dugdale \ Litter 69/180 \ DSIR\ Ns \ NZ PB \; 1 female labeled: \ L.Sylvester 1432m. NN 29 Oct 69 J.S. Dugdale \ Litter 69/141 \ NZ PB \; 1 male and 4 females labeled: \ L.Sylvester 1402m. Cobb Nelson \ 29 Oct 69 J.S. Dugdale \ Mats 69/179 \ NZ PB \; 6 males and 1 female labeled: \ L.Sylvester 4300' Cobb Nelson \ 30 Apr 69 J.S. Dugdale \ tussock 69/139 \ NZ PB \; 3 males and 7 females labeled: \ L.Sylvester Cobb. Nelson 31.x.69 4330' J.C. Watt \ Litter 69/122 \ NZ PB \; 2 males and 3 females labeled: \ L.Sylvester 4600' Nel. 29.x.69 J.S. Dugdale \ Mat plants 69/182 \ NZ PB \; 4 males and 2 females labeled: \ Iron Hill, 5500' Cobb, Nelson 31 March 69 J.C. Watt \ Plants 69/116 \ NZ PB \; 1 male labeled: \ Iron Hill Ridge 1602m. Cobb Nel. 16.III.68 J.S. Dugdale \ Mat Plants 68/98 \ NZ PB \; 10 males and females labeled: \ Iron L. 4900' Cobb Nel. 31.iii.69 J.S. Dugdale \ moss 69/119 \ NZ PB\; 1 female labeled: \ Summt. Ridge Iron Hill 1600m L.Sylvester NN 18 Nov 72 \ 72/193 J.S. Dugdale \ NZ PB \; 2 males and 3 females labeled: \ Iron Lake Cobb area 4660'. 16.ii.68 J.S. Dugdale \ mat plants 6/96 \ *Nesamblyops subcaecus* (Sharp) Det. I.Townsend \ NZ PB \; 3 males and 1 female labeled: \ Mt Arthur 1372m. NN 24 Mar 71 J.S. Dugdale \ 71/91 Swards \ DSIR\ Ns \ NZ PB \; 11 males and females labeled: \ NEW ZEALAND NN Mt.Arthur 1341m 24 Mar 1971 J.S. Dugdale Swards 71/91 \ NZ PB \; 2 males and 1 female labeled: \ Mt Arthur 1200m Nelson 13-20 Nov 69 J.I. Townsend \ moss 69/230 \ NZ PB \; 2 females labeled: \ Mt.Arthur 4000' Nel. 13.xi.69 J.I. Townsend \ Celmisia Litter 69/216 \ NZ PB \; 1 male labeled: \ Flora Hut 900m Mt Arthur Nelson 21 Nov 69 J.N. Jolly \ Litter 69/233 \ DSIR\ Ns \ NZ PB \; 1 male labeled: \ NEW ZEALAND MB Schrodess Cr. Upper Wairau V. 792m 7 Sept 1966 L.P. Marchaut \ Mixed moss \ Litter 66/294 \ NZ PB \; 25 males and females labeled: \ Mt.Johnson 5200' Richmond Ra. \ 13 Mar 69 J.S. Dugdale \ litter 69/99 \ NZ PB \; 8 males and females labeled: \ Johnson Pk 5200' \ Richmond Ra. 13 Mar 69 J.C. Watt \ litter 69/98 \ DSIR\ Ns \ NZ PB \; 9 males and females labeled: \ Johnson Pk 5100' \ Richmond Ra. \ 13 Mar 69 J.C. Dugdale \ litter 69/101 \ NZ PB\; 22 males and females labeled: \ Johnson Fell Pk Saddle 4900' \ Richmond Ra. 13 Mar 69 E.W. Valentine \ mats 69/106 \ NZ PB \; 13 males and females labeled: \ Johnson Fell Pk Sdle Richmond Ra \ 1493m 13 Mar 69 J.S. Dugdale \ Mats 69/104 \ NZ PB \; 18 males and females labeled: \ Johnson, Pk Fell Richmond Ra. 13.iii.69 4900' J.S. Dugdale \ litter & swards 69/103 \ DSIR\ Ns \ NZ PB\; 1 male and 2 females labeled: \ Johnson, Pk Fell Richmond Ra. 13.iii.69 5300' J.S. Dugdale \ litter 69/93 \ NZ PB \; 3 males labeled: \ Johnson Pk 1555m Richmond Ra. \ 13 Mar 69 litter J.S. Dugdale 69/100 \ NZ PB \; 1 male and 3 females labeled: \ Johnson Pk Richmond Ra. 13.iii.69 J.C. Watt \ Litter 67/97 \ DSIR\ Ns \ NZ PB \; 3 males and 3 females labeled: \ Mt Altimarlock Black Birch Ra. Marlborough 1200–1800m \ G. Kuschel 16 Feb 70 \ Mats 70/119 \ DSIR\ Ns \ NZ PB \; 1 female labeled: \ Mt.Altimarlock 5550'

Marlb. 16.ii.70 G.Kuschel \ Plants \ DSIR\ Ns \ NZ PB \; 1 female labeled: \ Black Birch Range, Marl. 4500' 27.9.65 \ J.I. Townsend moss in tussock 65/495 \ NZ PB \; 1 male labeled: \ Mt Murchison 1420m. MB 21 Nov 71 J.C. Watt \ Litter 71/154 \ DSIR\ Ns.

Additional material: 1 male labeled: \ Ngaiatonga Saddle 800' Northland 13.XI.67 J. McBurney \ Litter 67/261 \ DSIR\ Ns \ NZ PB \; 2 males and 1 female labeled: \ Auckland 4 Jan 73 B.M. May \ DSIR\ Ns \ NZ PB \.

Etymology. The specific epithet is a Latin adjective, *montanus* (meaning "dwelling in the mountains"), in the masculine form and refers to the type of landscape where the new species occurs.

Type locality. New Zealand, South Island, Nelson, Kahurangi National Park, Lake Sylvester area.

Recognition. Adults of this species (Fig. 10A) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 10B, 11B) and are distinguished from them by the structures of the male genitalia.

Description. Small for genus (SBL range 1.40–1.72 mm, mean 1.57±0.085 mm, n=33).

Habitus. Body form (Fig. 10A) slightly convex, elongate ovoid, general proportions wide (WE/SBL 0.40±0.014), head moderately wide relative to pronotum (WH/WPm 0.74±0.024), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.74±0.029).

Color. Body color rufotestaceous, appendages testaceous.

Prothorax. Pronotum (Fig. 12G) slightly long in comparison to elytra (LP/LE 0.40±0.013) and moderately transverse (WPm/LP 1.27±0.039), with lateral margins rectilinear constricted posteriorly (WPm/WPp 1.41±0.048). Anterior angles indistinct, posterior angles obtuse (121–133°), slightly angulated. Width between posterior angles equals the width between anterior angles (WPa/WPp 1.01±0.053). Basal margin slightly convex.

Elytra. Ovoid, widely depressed along suture, comparatively long (LE/SBL 0.58±0.009) and moderately wide (WE/LE 0.68±0.025). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 15C) moderately arcuate and slightly twisted. Shaft slightly convex at dorsal side basally, almost subparallel medially, moderately tapering in apical third. Apex straight with semicircular tip of moderate size. Apical orifice of moderate length occupies one third of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft with numerous poriferous canals scattered across shaft body. Dorsal copulatory sclerites typical for genus with the following modifications. Medial rC-sclerite small, while dorsal V-contour large, shaped by strongly sclerotized and widely divergent structures (Fig. 15C). In addition, there is a weakly sclerotized field apically from V-contour. Left paramere (Fig. 15A) comparatively wide, with short apex, bearing two long setae. Right paramere (Fig. 15B) narrow, of moderate length, bearing three long setae, equal to the length of paramere. Ring sclerite as in Fig. 17F.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies mountainous areas of the South Island within south-central parts of Tasman and Marlborough Districts (Fig. 20, black circles). The distribution of this species needs further investigation taking into account the presence in examined material of three specimens collected in the northern third (Auckland and Northland) of the North Island. If it is not a result of mislabeling, then the species might have a great disjunctive range occupying two distant areas in northern parts of the South and the North Islands. It is worth to mention that a great disjunction in the geographical distribution is also recorded for *Nesamblyops disjunctus* (see above).

Habitat. Specimens were collected from swards, mat plants, moss, moss and rotten wood, and litter samples (labels mention tussock (Poaceae) and *Celmisia* (Asteraceae) litter).

Relationships. The structure of the male genitalia of *N. montanus* suggests its relatedness to the other species having V-contour and rC-copulative sclerite in copulative sclerites of median lobe. The reduced state of rC-sclerite suggests an isolated position of *N. montanus* within the genus.

***Nesamblyops moorei*, sp. nov.**

Figures. 10B, 12H, 15D–F, 17G, 22

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ NEW ZEALAND BR Mawhera SF Kangaroo Ck 5km SE Ngahere 27 Jan 1972 \ J.S. Dugdale Litter 72/86 \ Beech Forest Utilization Project \ DSIR\ No \ NZ PB \.

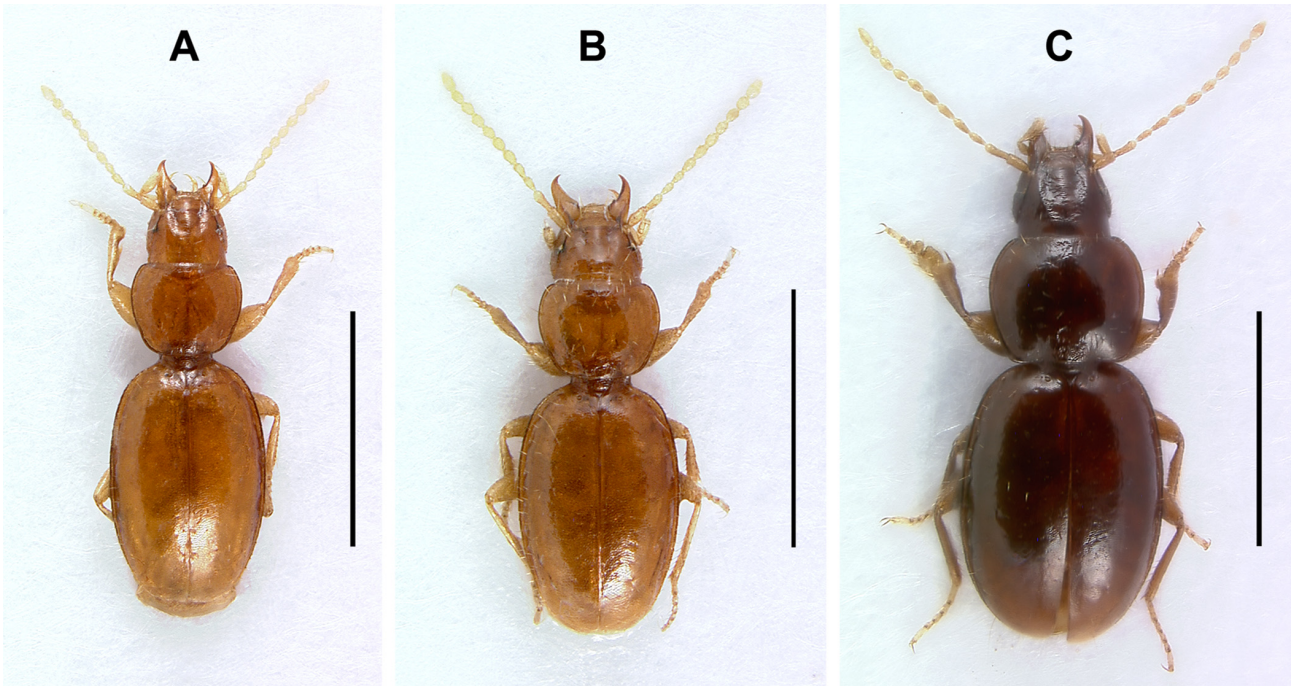

FIGURE 11. Digital images of habitus of New Zealand *Nesamblyops* species, dorsal aspect. **A**—*N. subrufus* (Dublin Terrace, Upper Buller Gorge, Nelson, SO), **B**—*N. viator* (Secretary Island, Grono Bay, Fiordland, SO), **C**—*N. victoriae* (Capleston, Victoria Range, Buller, SO). Scale bar = 1.0 mm.

PARATYPES (35 specimens, dissected 11 exx.), 2 males and 2 females labeled same as holotype; 2 females labeled: \ NEW ZEALAND BR Mawhera SF 10 Nov 1971 J. McBurney Litter 71/144 \ Beech Forest Utilization Project \ DSIR\ No \ NZ PB \; 1 female labeled: \ NEW ZEALAND SC Mawhere S.F. 15km SE of Ngahere 305m 10 Nov 1971 J.S. Dugdale \ Litter 71/43 \ NZ PB \; 1 female labeled: \ NEW ZEALAND BR Tuttys Plateau Mawhera SF 20 Sep 1972 J.S. Dugdale \ moss 72/178 \ Beech Forest Utilization Project \ NZ PB \; 1 male labeled: \ Rapahoe 7ml. N of Greymouth 29.5.62 G. Kuschel \ DSIR\ No \; 1 male labeled: \ E Reefton BR 10 Feb 65 N.A. Walker \ Litter 65/33 \ DSIR\ No \ NZ PB \; 1 male labeled: \ NEW ZEALAND BR Tawhai SF Big Red Rd 3km S of Reefton 28 Jan 1972 \ J. McBurney Litter 72/76 \ DSIR\ No \ NZ PB \; 1 male and 3 females labeled: \ NEW ZEALAND BR Tawhai SF 3km S of Reefton 9 Nov 1971 J.S. Dugdale \ Litter 71/128 \ DSIR\ No \; 1 male labeled: \ NEW ZEALAND BR Lake nr. Mt.Priestly Paparoa Ra. 1060m 10 Dec 1969 J. McBurney \ Litter 69/241 \ NZ PB \; 1 male and 2 females labeled: \ Hochstetter BR 7 Nov 1972 J.S. Dugdale Litter 72/189 \ Beech Forest Utilization Project \ NZ PB \; 1 male and 1 female labeled: \ NEW ZEALAND BR Jacksons Taramakau Rd, 150m 26 Jan 1978 G. Kuschel \ Sifted litter and rotten wood 78/55 \ NZ PB \; 5 males and 6 females labeled: \ NEW ZEALAND BR Punakaiki 46m Truman Track 9 Jun 1983 H.P. McColl \ Litter 7/83 \ NZ PB \; 1 female labeled: \ Bullock Creek Punakaiki Nelson 12 Oct 70 \ J.I. Townsend Litter 70/154 \ NZ PB \; 2 males labeled: \ New Zealand WD Kellys Creek Otira 22-Mar-09 \ Washed soil sample, broadleaf forest \ NZMS 260 K33: 932218 350m \.

Etymology. The specific epithet is a Latinized eponym in the genitive case and is based on the surname of Barry Philip Moore, famous Australian entomologist and chemist, who contributed greatly to the knowledge of Australian and New Zealand Carabidae, including the publication of the revision of New Zealand Anillini.

Type locality. New Zealand, South Island, West Coast, Ngahere area, Mawhera Forest.

Recognition. Adults of this species (Fig. 10B) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 9E, 10C) and are distinguished from them by the structures of the male genitalia.

Description. Small for genus (SBL range 1.43–1.75 mm, mean 1.63±0.110 mm, n=19).

Habitus. Body form (Fig. 10B) moderately convex, elongate ovoid, general proportions wide (WE/SBL 0.41±0.010), head narrow relative to pronotum (WH/WPm 0.71±0.019), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.75±0.021).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12H) moderately long in comparison to elytra (LP/LE 0.41±0.009) and moderately transverse (WPm/LP 1.27±0.034), with lateral margins almost rectilinear constricted posteriorly (WPm/WPp 1.29±0.033). Anterior angles indistinct, posterior angles obtuse (114–123°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.90±0.031). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.59±0.006) and moderately wide (WE/LE 0.69±0.014). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 15F) moderately arcuate and slightly twisted. Shaft subparallel basally, moderately tapering in apical half. Apex straight with small, rounded tip. Apical orifice of moderate length occupies one third of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft lacking poriferous canals. Dorsal copulatory sclerites with following modifications. Dorsal V-contour reduced and represented only by short dorsal branch, while medial rC-sclerite of typical size and sclerotization for genus (Fig. 15F). In addition, there are two moderately sclerotized elongate structures apically from the main sclerites with the longest of those forming together with the rC-sclerite a distinctive teardrop shape. Left paramere (Fig. 15D) comparatively wide, with short apex, bearing two long setae. Right paramere (Fig. 15H) narrow, of moderate length, bearing two long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17G.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies the territory to the west of the Southern Alps from the Tamarakau River at the south to Paparoa National Park at the north, in the central part of the West Coast District (Fig. 22, black circles).

Habitat. Specimens were collected from litter, litter and rotten wood, and moss samples (labels mention broadleaf forest as plant community without further details).

Relationships. The structure of the male genitalia of *N. moorei* suggests its relatedness to the other species with rC-sclerite and V-contour in copulatory sclerites of median lobe. Small V-contour, the shape of median lobe, and bisetose parameres suggest the affinity between *N.moorei* and *N. kuscheli*.

***Nesamblyops ovipennis*, sp. nov.**

Figures. 10C, 12I, 15G–I, 17H, 19

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ Mt.Arthur 1140m Nelson 13–19 Nov 69 J.I. Townsend \ Mats 69/216 \ DSIR\ No \ NZ PB \. ***PARATYPES*** (12 specimens, dissected 5 exx.), 1 male and 1 female labeled same as holotype; 1 male labeled: \ 2m. below Lake Cobb Nelson. \ 17.ii.67 F.Alack \ litter 67/90 \ *Nesamblyops oreobius* (Broun) Det. I.Townsend 1973 \ DSIR\ No \ NZ PB \; 1 male and 1 female labeled: \ Mt.Arthur 13–1500m Nelson 14–19 Nov 69 J.I. Townsend \ Litter 69/227 \ DSIR\ No \ NZ PB \; 2 males and 1 female labeled: \ Mt.Arthur 1140m Nelson 13–19 Nov 69 J.I. Townsend \ Mats 69/216 \ DSIR\ No \ NZ PB \; 1 male and 3 females labeled: \ Devils Thumb Wangapeka \ 19.iv.67 F.Alack \ litter 67/195 \ DSIR\ No \ NZ PB \.

Etymology. The specific epithet is a Latin adjective (from Latin *ovum* meaning 'egg, oval" and *pennae* meaning "feather, wings") in the masculine form and refers to the oval shape of the elytra of the new species.

Type locality. New Zealand, South Island, Nelson, Kahurangi National Park, Mount Arthur.

Recognition. Adults of this species (Fig. 10C) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 9B, E) and are distinguished from them by the structures of the male genitalia.

Description. Large for genus (SBL range 1.72–2.01 mm, mean 1.82±0.124 mm, n=9).

Habitus. Body form (Fig. 10C) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.41±0.007), head narrow relative to pronotum (WH/WPm 0.69±0.022), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.75±0.025).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 12I) moderately long in comparison to elytra (LP/LE 0.41±0.009) and moderately transverse (WPm/LP 1.24±0.021), with lateral margins rectilinear constricted posteriorly (WPm/WPp 1.31±0.037). Anterior angles indistinct, posterior angles obtuse (114–124°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.90±0.033). Basal margin almost rectilinear.

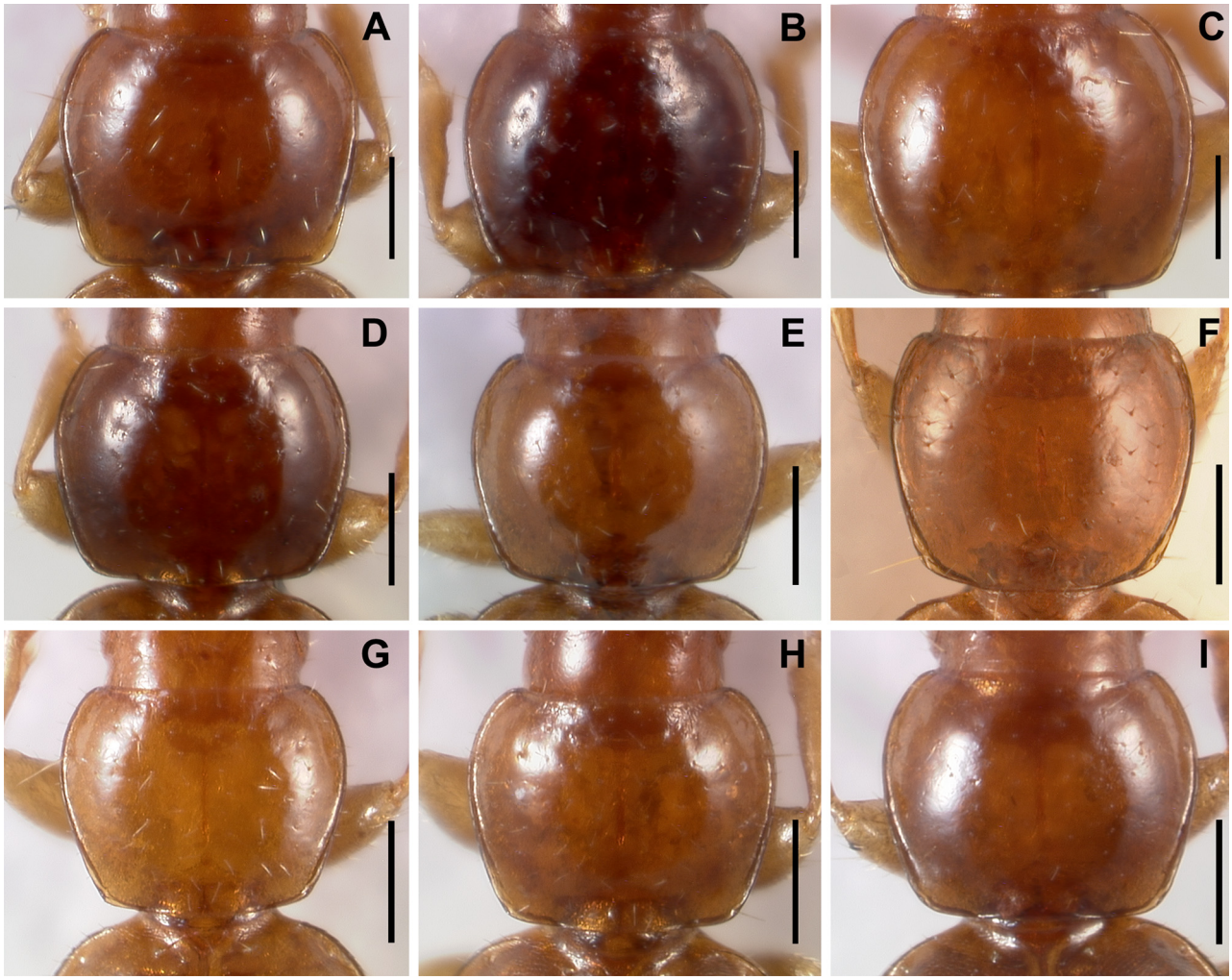

FIGURE 12. Digital images of pronota of New Zealand *Nesamblyops* species, dorsal aspect. **A**—*N. canaanensis* (Canaan, Nelson, SO), **B**—*N. disjunctus* (Fletchers Creek, Buller, SO), **C**—*N. hobbit* (9mi. N Karamea, Nelson, SO), **D**—*N. karamea* (Karamea River Gorge, Nelson, SO), **E**—*N. kuscheli* (Flora Hut, Mount Arthur, Nelson, SO), **F**—*N. magnificus* (Allison Reserve, Akatore, Dunedin, SO), **G**—*N. montanus* (Lake Sylvester, Kahurangi National Park, Nelson, SO), **H**—*N. moorei* (Kangaroo Creek, Mawhera Forest, Buller, SO), **I**—*N. ovipennis* (Mount Arthur, Nelson, SO). Scale bar = 0.2 mm.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.59±0.007) and moderately wide (WE/LE 0.67±0.018). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 15I) moderately arcuate and moderately twisted. Shaft widening basally, tapering in apical half. Apex curved dorsally with narrowly rounded tip. Apical orifice long, occupies almost half of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft with several poriferous canals scattered across shaft body. Dorsal copulatory sclerites with rC-sclerite and V-contour of moderate sizes, the latter with dorsal branch protruding toward basal orifice (Fig. 15I). Left paramere (Fig. 15G) comparatively wide, with narrow apex, bearing three long setae. Right paramere (Fig. 15H) narrow, of moderate length, bearing three long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17H.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species lies in the northwest corner of the South Island and occupies the east-central part of the Kahurangi National Park stretching from the Wangapeka River at the south to the Tasman Mountains at the north (Fig. 19, blue circles).

Habitat. Specimens were collected mostly from litter and [plant] mats.

Relationships. The structure of the male genitalia of *N. ovipennis* suggests its relatedness to the other species with trisetose parameres and well-developed rC-sclerite, such as *N. hobbit* and *N. canaanensis*.

***Nesamblyops rotundicollis*, sp. nov.**
Figures. 10D, 13A, 15J–L, 17I, 18B, 20

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ Ridge above Onekaka. Iron ore pit \ 20.v.67 F.Alack \ litter 67/205 \ DSIR\ No \. ***PARATYPES*** (5 specimens, dissected 3), 1 male labeled: \ litter Nelson, N.Z. Parapara Inlet G.B. 15.II.72 J.I. Townsend \ J.I. Townsend Collection \; 1 female labeled: \ PuPu Valley 21.v.67 F.Alack \ litter 67/204 \ DSIR\ No \ NZ PB\; 1 female labeled: \ PuPu Valley Takaka, Nelson 11 Nov. 71 J.I. Townsend \ NZ PB\; 1 female labeled: \ Paramahoi Nel. Litter 26-10-65 L.P. Marchaut \ NZ PB \; 1 female labeled: \ Paramahoi Takaka Dist. Nel. 25.10.65 \ J.I. Townsend \.

Etymology. The specific epithet is a Latin adjective (from Latin *rotundus* meaning "round, circular" and *collum* meaning "neck") in the masculine form and refers to the shape of pronotum of the new species.

Type locality. New Zealand, South Island, Nelson, Kahurangi National Park, Onekaka area.

Recognition. Adults of this species (Fig. 10D) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 10E–F, 11A–B) and are distinguished from them by the structures of the male genitalia.

Description. Large for genus (SBL range 1.84–2.07 mm, mean 1.92±0.103 mm, n=4).

Habitus. Body form (Fig. 10D) moderately convex, elongate ovoid, general proportions slightly wide (WE/SBL 0.39±0.009), head narrow relative to pronotum (WH/WPm 0.70±0.014), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.72±0.006).

Color. Body color brunneorufous, appendages testaceous.

Prothorax. Pronotum (Fig. 13A) moderately long in comparison to elytra (LP/LE 0.41±0.006) and slightly transverse (WPm/LP 1.16±0.019), with lateral margins slightly and rectilinear constricted posteriorly (WPm/WPp 1.22±0.023). Anterior angles indistinct, posterior angles obtuse (115–124°), widely rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.85±0.041). Basal margin slightly convex.

Elytra. Ovoid, moderately depressed along suture, comparatively long (LE/SBL 0.59±0.002) and moderately wide (WE/LE 0.66±0.015). Humeri completely rounded. Lateral margins slightly divergent at basal third, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 15L) moderately arcuate and slightly twisted. Shaft almost subparallel in basal half, moderately tapering in apical half. Apex straight, subparallel and long with asymmetrically rounded wide tip. Apical orifice long, occupies almost half of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft with group of poriferous canals at basal orifice. Dorsal copulatory sclerites atypical for genus. V-contour and rC-sclerite lacking. Instead of them only one dorsal membraneous field exists at the middle of shaft (Fig. 15L). The field has narrow sclerotization along its dorsal edge presumably corresponding to the dorsal branch of V-contour. Additionally, internal sac has scaly membraneous field of moderate size at apical orifice. Left paramere (Fig. 15J) comparatively narrow, with attenuate apex, bearing two long setae. Right paramere (Fig. 15K) narrow, of moderate length, bearing two long setae, which are shorter than the length of paramere. Ring sclerite as in Fig. 17I.

Female internal genitalia. Spermatheca (Fig. 18B) with two sclerotized compartments, a larger ball-shaped distal part and a short, curved, tube-like part representing sclerotized continuation of spermathecal duct. Tube-like part bears spermathecal gland, which is longer than the length of spermatheca. Spermathecal duct short, approximately equals the length of spermathecal gland.

Geographical distribution. The range of the species lies in the northwest corner of the South Island at the northeastern part of the Kahurangi National Park, where the species was collected on the eastern slopes of Parapara Peak (Fig. 20, pink circles).

Habitat. Specimens were collected mostly from litter samples.

Relationships. The structures of the male genitalia and parameres of *N. rotundicollis* suggests its relatedness to *N. solitarius* and *N. subrufus*, described below. All three species share bisetose parameres, the lack of rC-sclerite, and a scaly membraneous field near apical orifice in the internal sac of median lobe, the latter is presumably a synapomorphic character of this small group of species.

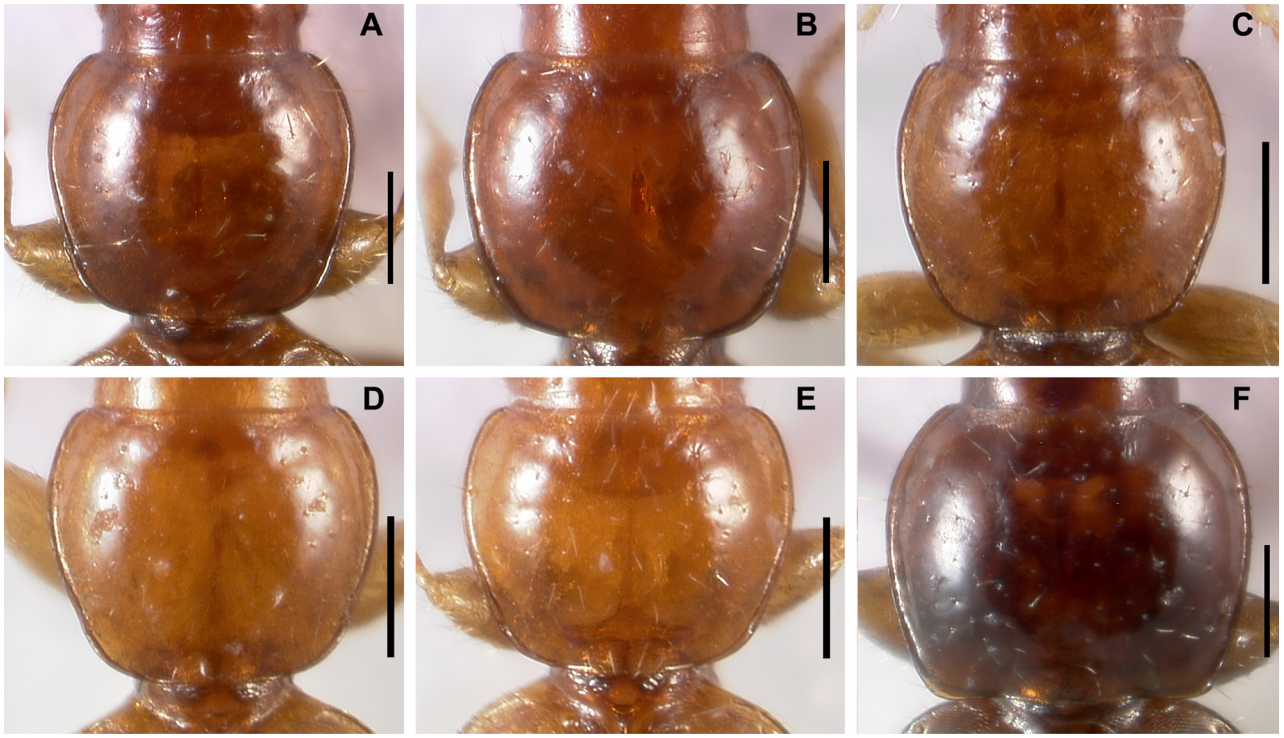

FIGURE 13. Digital images of pronota of New Zealand *Nesamblyops* species, dorsal aspect. **A**—*N. rotundicollis* (Onekaka, Nelson, SO), **B**—*N. solitarius* (Italian Creek, Capleston, Buller, SO), **C**—*N. subcaecus* (Greymouth, Buller, SO), **D**—*N. subrufus* (Dublin Terrace, Upper Buller Gorge, Nelson, SO), **E**—*N. viator* (Secretary Island, Grono Bay, Fiordland, SO), **F**—*N. victoriae* (Capleston, Victoria Range, Buller, SO). Scale bar = 0.2 mm.

***Nesamblyops solitarius*, sp. nov.**
Figures. 10E, 13B, 15M–O, 20

Type material. ***HOLOTYPE***, male, in NZAC, labeled, dissected: \ NEW ZEALAND BR Boatmans Ck 4.5km SE of Cronodun Nov 1971 J.McBurney Litter 71/140 \ Beech Forest Utilization Project \ DSIR\ No \ NZ PB \. ***PARATYPES*** (2 specimens, dissected 1 ex.), 1 male and 1 female labeled: \ NEW ZEALAND BR 1.6km NW of Capleston Italians Ck 21 Apr 1972 \ J.S. Dugdale moss and litter 71/98 \ Beech Forest Utilization Project \ DSIR\ No \ NZ PB \.

Etymology. The specific epithet is a Latin adjective, *solitarius* (meaning "living alone"), in the masculine form, and is alluding to the small number of specimens of this species, which are known to science at present.

Type locality. New Zealand, South Island, West Coast, western foothills of Victoria Range, Capleston area.

Recognition. Adults of this species (Fig. 10E) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 10D, F) and are distinguished from them by the structures of the male genitalia.

Description. Large for genus (SBL range 2.02–2.08 mm, mean 2.05±0.042 mm, n=2).

Habitus. Body form (Fig. 10E) moderately convex, elongate ovoid, general proportions slightly wide (WE/SBL 0.38±0.003), head narrow relative to pronotum (WH/WPm 0.70±0.005), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.76±0.003).

Color. Body color rufotestaceous, appendages testaceous.

Prothorax. Pronotum (Fig. 13B) moderately long in comparison to elytra (LP/LE 0.42±0.006) and slightly transverse (WPm/LP 1.17±0.012), with lateral margins slightly and rectilinear constricted posteriorly (WPm/WPp 1.20±0.029). Anterior angles indistinct, posterior angles obtuse (124–125°), widely rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.83±0.014). Basal margin slightly convex.

Elytra. Ovoid, moderately depressed along suture, comparatively long (LE/SBL 0.59±0.012) and moderately narrow (WE/LE 0.64±0.018). Humeri completely rounded. Lateral margins slightly divergent at basal third, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 15O) moderately arcuate and slightly twisted. Shaft almost subparallel in basal half, moderately tapering in apical half. Apex long and straight with slightly dilated symmetrical rounded tip. Apical orifice long, occupies almost one half of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft with several poriferous canals scattered across shaft body. Dorsal copulatory sclerites atypical for genus. V-contour and rC-sclerite lacking. Only dorsal membraneous field with narrow sclerotization at its dorsal edge exists at the middle of shaft (Fig. 15O). In addition, internal sac has a scaly membraneous field at apical orifice. Left paramere (Fig. 15M) comparatively wide, with shortly attenuate apex, bearing two long setae. Right paramere (Fig. 15N) narrow, of moderate length, bearing two long setae, which are shorter than the length of paramere. Ring sclerite not investigated.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species lies in the northern half of the West Coast region, where the species was collected in two localities around Capleston at the foothills of the Victoria Range (Fig. 20, green circles).

Habitat. Specimens were collected from moss and litter samples.

Relationships. The structure of the male genitalia and parameres of *N. solitarius* suggests its relatedness to *N. rotundicollis* and *N. subrufus*, described below. All three species share bisetose parameres and the lack of rC-sclerite in the internal sac of median. Also, all three species have presumably a synapomorphic character—a scaly membraneous field near apical orifice.

Nesamblyops subcaecus (Sharp) (dissected 5 exx.)

Figures. 10F, 13C, 15P–R, 17J, 18C, 21

=*Cillenum subcaecum* Sharp, 1886: 375.

Material examined: \ NEW ZEALAND, BR Greymouth King Domain 122m 10 Jun 1983 H.P. McColl \ Litter 15/83 \ NZ PB\ (1 female); \ Kings Domain Greymouth Westland \ Coll. E.Fairburn 8-1-1945 \ *Anillus* sp. \ Leafmould \ A.E. Brookes Collection \ (1 female); \ Moa Basin \ T.Broun Collection \ A.E. Brookes Collection \ DSIR\ Ns \ NZ PB \ (1 male); \ Arthurs Pass 2500' 24.3.65 \ N.A. Walker \ DSIR\ Ns \ NZ PB\ (1 female); \ NEW ZEALAND MC Arthurs Pass Bealy Valley Margarets Tarn 883m \ 8 Feb 1982 J.S. Dugdale Litter 82/21 \ NZ PB \ (4 males and females); \ NEW ZEALAND MC Arthurs Pass Dobson Nature Walk 8 Feb 1982 \ C.F.Butcher sifted litter 82/26 \ NZ PB\ (1 male); \ in moss Temple Basin Arthurs Pass 3600' 12 Nov 1966 B.M. May \ (1 female); \ NEW ZEALAND WD Mt Tuhua, 1067m E.side of L. Kaniere 20 Nov 1984 \ C.F. Butcher Litter and mats 84/74 \ NZ PB\ (7 males and females).

Taxonomical notes. My interpretation of *N. subcaecus* is based on the specimen (see Material examined above) originated from the type locality of the species ("Greymouth. Helms, ex. Reitter", p. 375, Sharp 1886). Unfortunately, this specimen is a female, so, its association with a certain group of specimens is based exclusively on external morphological data. Another issue needs to be mentioned here is that the type locality of *Tachys coriaceus* Broun (synonym of *N. oreobius* (Broun, 1893), established by Moore, 1980) located within the range of the species I consider to be named as *N. subcaecus*. If the geographical label is correct, then the type specimen of *T. coriaceus* cannot be a synonym of *N. oreobius*, which range is limited to the central parts of the North Island (Sokolov 2023). At the same time, it cannot be a synonym of *N. subcaecus* also, because Thomas Broun writes in his description of *T. coriaceus* that the specimen has "broader form, evidently more transverse thorax" than *N. oreobius*, described by him 15 years earlier. According to our data *N. subcaecus* is distinguished from *N. oreobius* by having narrower proportions (cf. pronotal proportions WPm/LP 1.22±0.025 vs 1.26±0.021, and elytral proportions WE/LE 0.65±0.020 vs 0.69±0.012, for *N subcaecus* and *N. oreobius* subsequently). In addition, in the description the size of the type specimen of *T. coriaceus* is mentioned as 1.85 mm ("7/8 line", Broun 1908); this unequivocally points to affinity of the type to the group of large species of *Nesamblyops*. In examined material none of the large species of *Nesamblyops* has been collected in this area, hence at present the name *T. coriaceus* cannot be attributed to a particular local species with certainty.

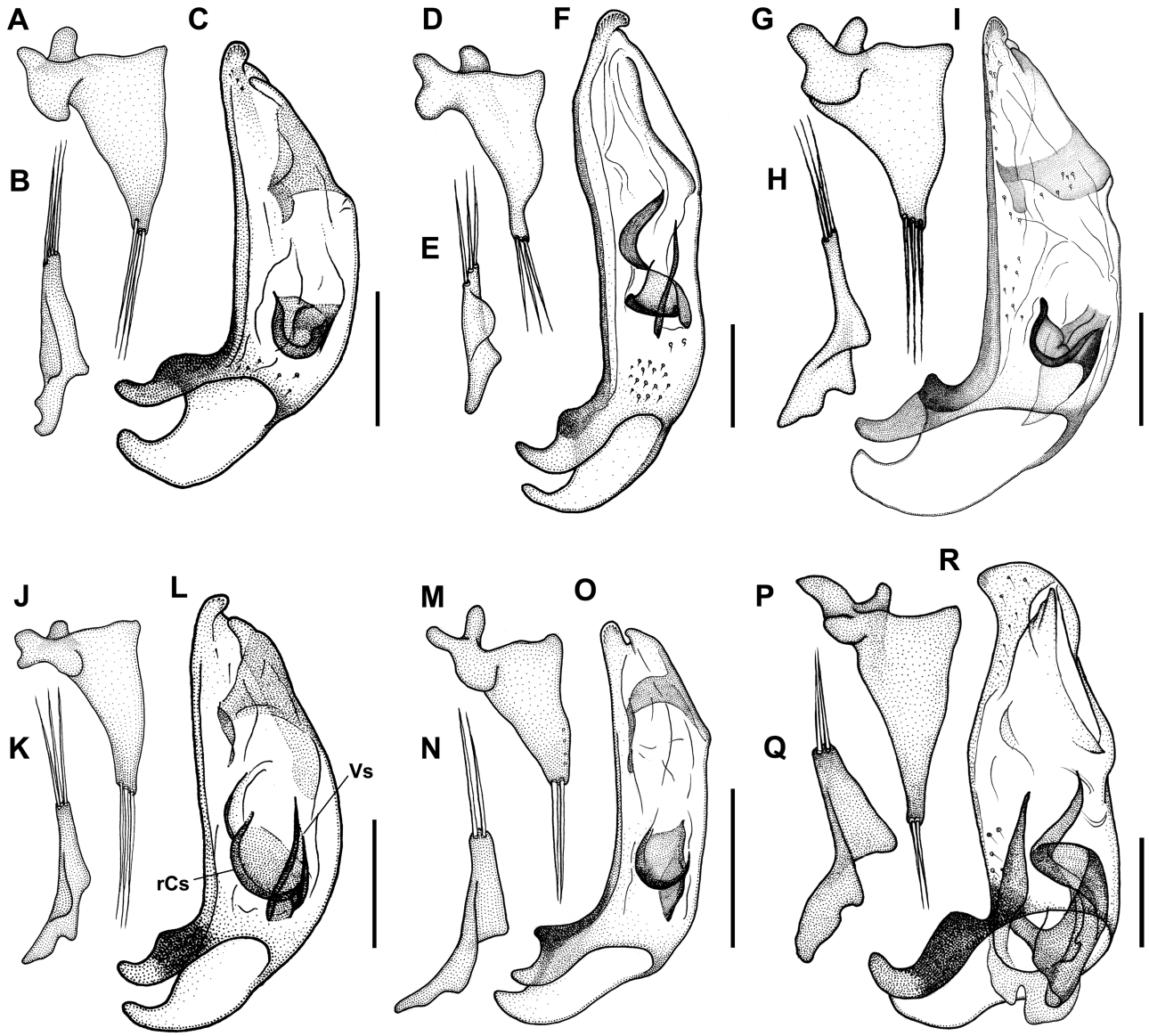

FIGURE 14. Line drawings of male genitalia of New Zealand *Nesamblyops* species. *N. canaanensis* (Canaan, Nelson, SO): **A**—left paramere, left lateral aspect, **B**—right paramere, right lateral aspect, **C**—median lobe, right lateral aspect. *N. disjunctus* (Fletchers Creek, Buller, SO): **D**—left paramere, left lateral aspect, **E**—right paramere, right lateral aspect, **F**—median lobe, right lateral aspect. *N. hobbit* (Mount Domett, Nelson, SO): **G**—left paramere, left lateral aspect, **H**—right paramere, right lateral aspect, **I**—median lobe, right lateral aspect. *N. karamea* (Karamea River Gorge, Nelson, SO): **J**—left paramere, left lateral aspect, **K**—right paramere, right lateral aspect, **L**—median lobe, right lateral aspect. *N. kuscheli* (Flora Hut, Mount Arthur, Nelson, SO): **M**—left paramere, left lateral aspect, **N**—right paramere, right lateral aspect, **O**—median lobe, right lateral aspect. *N. magnificus* (Allison Reserve, Akatore, Dunedin, SO): **P**—left paramere, left lateral aspect, **Q**—right paramere, right lateral aspect, **R**—median lobe, right lateral aspect. Legend: rCs—reversed C-contour; Vs—V-contour. Scale bar = 0.1 mm.

The original description of *N. subcaecus* contains little diagnostic information that would allow correct identification. Below, I redescribe the species to make comparison of *N. subcaecus* with other species easier.

Type locality. New Zealand, South Island, West Coast, Greymouth area.

Recognition. Adults of this species (Fig. 10F) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 10D–E) and are distinguished from them by the structures of the male genitalia.

Description. Small for genus (SBL range 1.51–1.70 mm, mean 1.62±0.062 mm, n=14).

Habitus. Body form (Fig. 2F) moderately convex, elongate ovoid, general proportions wide (WE/SBL 0.39±0.009), head wide relative to pronotum (WH/WPm 0.76±0.023), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.73±0.015).

Color. Body color rufotestaceous, appendages testaceous.

Prothorax. Pronotum (Fig. 13C) moderately long in comparison to elytra (LP/LE 0.39±0.010) and moderately transverse (WPm/LP 1.22±0.025), with lateral margins rectilinear constricted posteriorly (WPm/WPp 1.34±0.047). Anterior angles indistinct, posterior angles obtuse (123–134°), widely rounded. Width between posterior angles equals width between anterior angles (WPa/WPp 1.00±0.040). Basal margin slightly convex.

Elytra. Ovoid, moderately depressed along suture, comparatively long (LE/SBL 0.60±0.009) and moderately narrow (WE/LE 0.65±0.020). Humeri completely rounded. Lateral margins slightly divergent at basal half, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 15R) moderately arcuate and slightly twisted. Shaft almost subparallel in basal half, moderately tapering in apical half. Apex moderately curved ventrally with tapering narrowly rounded tip. Apical orifice of moderate length occupies one third of shaft length. Ventral margin of median lobe straight in basal two thirds, slightly curved downward in apical third. Walls of shaft with several poriferous canals scattered in apical and basal parts of shaft. Dorsal copulatory sclerites atypical for genus. Only one weakly sclerotized field present at the middle of shaft in a form of short, wide, and curved stripe (Fig. 15R). V- and rC-sclerites lacking. Left paramere (Fig. 15P) wide, apex not attenuate, bearing two long setae. Right paramere (Fig. 15Q) narrow, of moderate length, bearing three long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17J.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies foothills and a part of the Southern Alps approximately from the catchment of Moa Stream and the Arthur's Pass area in the central Canterbury to the mouth of Grey River in the central West Coast region (Fig. 21).

Habitat. Specimens were collected from moss, litter, leaf mold, litter and [plant] mats samples.

Relationships. The structure of the male genitalia of *N. subcaecus* suggests its relatedness to the species with reduced and simple armature of the internal sac. In having only one sclerotized copulatory sclerite *N. subcaecus* demonstrates affinity to and presumably forms one group with *N. viator*, described below.

***Nesamblyops subrufus*, sp. nov.**

Figures. 11A, 13D, 16A–C, 20

Type material. ***HOLOTYPE***, male, in NZAC, labeled, dissected: \ Dublin Terrace 25.11.61 G.Kuschel \ Leafmould \ DSIR\ Ns \ NZ PB \. ***PARATYPES*** (2 specimens), 2 females labeled same as holotype.

Etymology. The specific epithet is a Latin adjective *subrufus* (meaning "somewhat red") in the masculine form and refers to the color of the new species.

Type locality. New Zealand, South Island, West Coast, Upper Buller Gorge, Dublin Terrace.

Recognition. Adults of this species (Fig. 11A) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs. 10D–E) and are distinguished from them by the structure of the male genitalia.

Description. Large for genus (SBL range 1.80–1.91 mm, mean 1.87±0.061 mm, n=3).

Habitus. Body form (Fig. 11A) markedly convex, elongate ovoid, general proportions slightly wide (WE/SBL 0.37±0.006), head moderately wide relative to pronotum (WH/WPm 0.75±0.025), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.74±0.005).

Color. Body color rufotestaceous, appendages testaceous.

Prothorax. Pronotum (Fig. 13D) moderately long in comparison to elytra (LP/LE 0.39±0.004) and moderately transverse (WPm/LP 1.18±0.018), with lateral margins rectilinear constricted posteriorly (WPm/WPp 1.21±0.029). Anterior angles indistinct, posterior angles obtuse (119–124°), widely rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.91±0.046). Basal margin slightly convex.

Elytra. Ovoid, moderately depressed along suture, comparatively long (LE/SBL 0.59±0.002) and moderately narrow (WE/LE 0.63±0.008). Humeri completely rounded. Lateral margins slightly divergent at basal third, subparallel at middle and evenly rounded to apex in apical third.

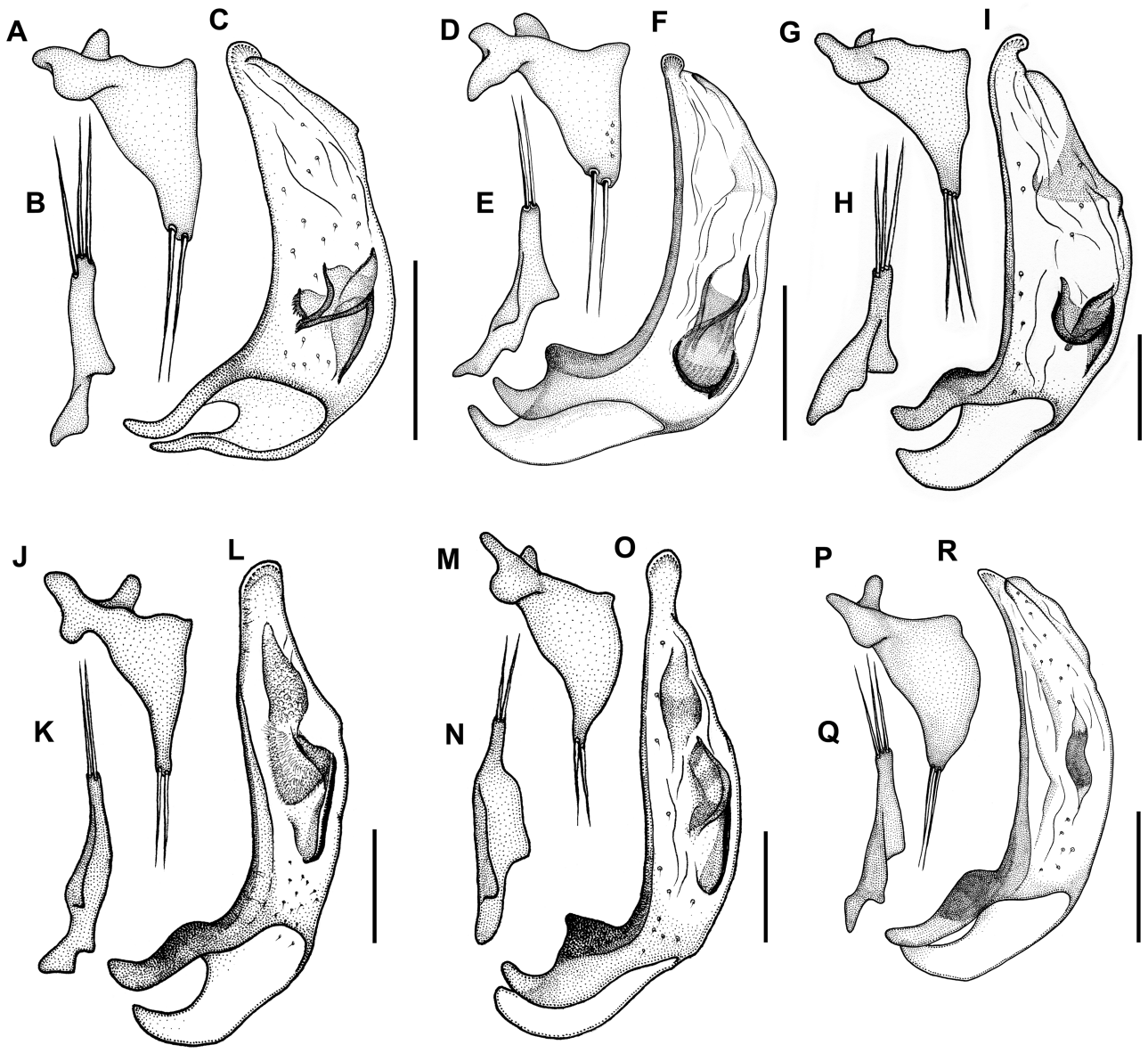

FIGURE 15. Line drawings of male genitalia of New Zealand *Nesamblyops* species. *N. montanus* (Relax Shelter, Mount Robert Ridge, Nelson, SO): **A**—left paramere, left lateral aspect, **B**—right paramere, right lateral aspect, **C**—median lobe, right lateral aspect. *N. moorei* (Kangaroo Creek, Mawhera Forest, Buller, SO): **D**—left paramere, left lateral aspect, **E**—right paramere, right lateral aspect, **F**—median lobe, right lateral aspect. *N. ovipennis* (Mount Arthur, Nelson, SO): **G**—left paramere, left lateral aspect, **H**—right paramere, right lateral aspect, **I**—median lobe, right lateral aspect. *N. rotundicollis* (Onekaka, Nelson, SO): **J**—left paramere, left lateral aspect, **K**—right paramere, right lateral aspect, **L**—median lobe, right lateral aspect. *N. solitarius* (Italian Creek, Capleston, Buller, SO): **M**—left paramere, left lateral aspect, **N**—right paramere, right lateral aspect, **O**—median lobe, right lateral aspect. *N. subacecus* (Margarets Tarn Lake, Arthur's Pass, Mid Canterbury, SO): **P**—left paramere, left lateral aspect, **Q**—right paramere, right lateral aspect, **R**—median lobe, right lateral aspect. Scale bar = 0.1 mm.

Male genitalia. Median lobe of aedeagus (Fig. 16C) moderately arcuate and barely twisted. Shaft with sides diverging from basal orifice towards middle, then slightly tapering apically. Apex straight, short, enlarged, widely rounded. Apical orifice of moderate length occupies one third of the shaft length. Ventral margin of median lobe almost straight. Walls of shaft lacking poriferous canals. Dorsal copulatory sclerites moderately deviate from typical state. Dorsal field with V-contour small, but distinct, and medial rC-sclerite wide and weakly sclerotized (Fig. 16C). Additionally, internal sac has a large scaly membraneous field near apical orifice. Left paramere (Fig. 16A) comparatively narrow, with strongly attenuate apex, bearing two long setae. Right paramere (Fig. 16B) narrow, long, bearing two long setae, which are shorter than the length of paramere. Ring sclerite not investigated.

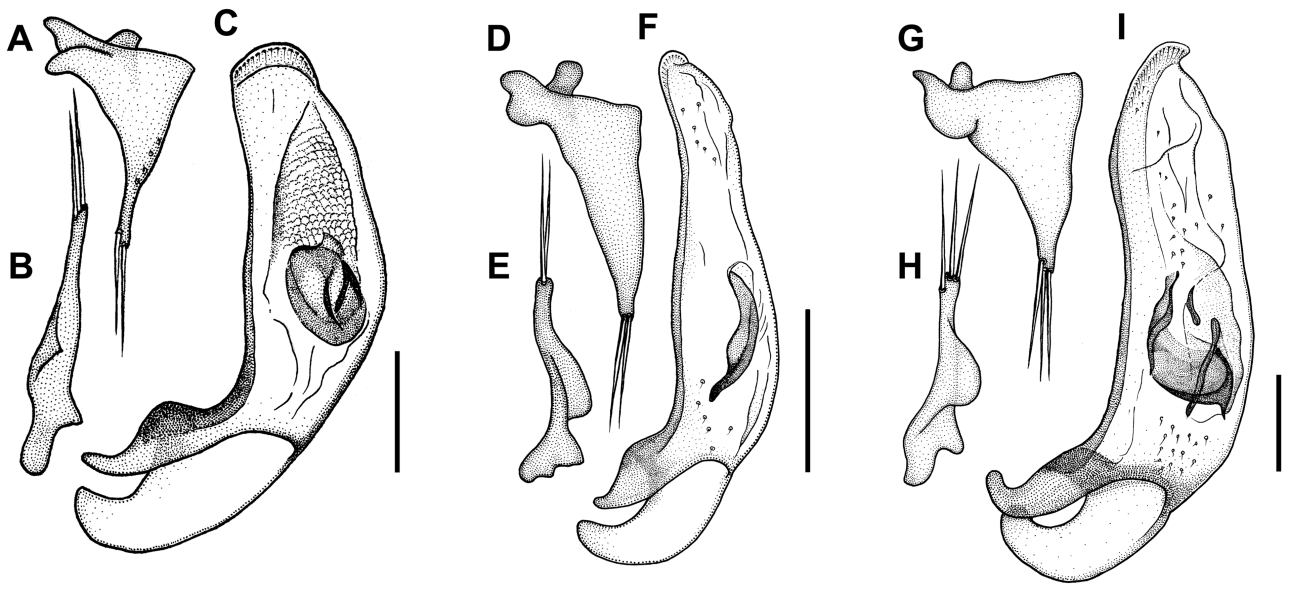

FIGURE 16. Line drawings of male genitalia of New Zealand *Nesamblyops* species. *N. subrufus* (Dublin Terrace, Upper Buller Gorge, Nelson, SO): **A**—left paramere, left lateral aspect, **B**—right paramere, right lateral aspect, **C**—median lobe, right lateral aspect. *N. viator* (Secretary Island, Grono Bay, Fjordland, SO): **D**—left paramere, left lateral aspect, **E**—right paramere, right lateral aspect, **F**—median lobe, right lateral aspect. *N. victoriae* (Capleston, Victoria Range, Buller, SO): **G**—left paramere, left lateral aspect, **H**—right paramere, right lateral aspect, **I**—median lobe, right lateral aspect. Scale bar = 0.1 mm.

Female internal genitalia. Not examined.

Geographical distribution. This species is known from only one locality situated near Manuka Flat in the Upper Buller Gorge, upstream from Inangahua at the northern West Coast region (Fig. 20, red circle).

Habitat. All three known to date specimens were collected from leafmould.

Relationships. The external morphology (body proportions, size) suggests relatedness of *N. subrufus* with *N. rotundicollis* and *N. solitarius*. The structure of the parameres (two setae, attenuate apex of left paramere) and the male genitalia (presence of scaly field in apical part of median lobe) support this statement. However, the state of copulatory sclerites of *N. subrufus* are quite different from those of *N. rotundicollis* and *N. solitarius*, but much closer to the copulatory sclerites of the other members of *Nesamblyops*, thus making a link between two agglomerations of taxa.

***Nesamblyops viator*, sp. nov.**

Figures. 11B, 13E, 16D–F, 17K, 23

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ NEW ZEALAND FD Resolution I Disappointment Cove 26 May 1982 \ C.F.Butcher ex moss \ NZ PB \. ***PARATYPES*** (49 specimens, dissected 7 exx.), 3 males and 1 female labeled same as paratype; 1 female labeled: \ NEW ZEALAND FD Bauza I 27 Nov 1981 C.F.Butcher \ litter and moss 81/187 \ NZ PB \; 1 male and 1 female labeled: \ NEW ZEALAND FD Bauza I 19 Mar 1984 C.F.Butcher Litter 84/55 \ NZ PB \; 3 males and 1 female labeled: \ Deep Cove Doubtful Snd \ Manapouri Exp. Jan 70 I.Townsend \ litter 70/65 \ DSIR\ Ns \ NZ PB \; 25 males and females labeled: \ Wilmot Pass 300m–630m \ litter 70/73 \ Manapouri Exp. Jan 70 I.Townsend \ DSIR\ Ns \ NZ PB \; 4 females labeled: \ Wilmot Pass 630m–800m \ litter 70/73 \ Manapouri Exp. Jan 70 J.Dugdale \ Mats 70/92 \ DSIR\ Ns \ NZ PB \; 1 female labeled: \ Spey R. 180m W.Manapauri Jan 70 A.C. Eyles Mats 70/62 \ NZ PB \; 1 female labeled: \ Spey River 180m \ Manapouri Exp. Jan 70 A.C. Eyles \ Mats 70/62 \ NZ PB \; 2 males labeled: \ Wilmot Pass 630m. W. of L.Manapouri \ 10 Jan 70 AC. Eyles Moss 70/34 \ NZ PB \; 1 male and 1 female labeled: \ NEW ZEALAND FD Secretary I Mt Grono, 853m 27 Nov 1981 C.F.Butcher \ mats, moss and tussock 81/186 \ NZ PB \; 2 females labeled: \ NEW ZEALAND FD Secretary I Grono Bay 28 Nov 1981 C.F.Butcher \ sifted litter 81/188 \ NZ PB \; 1 male labeled: \ NEW ZEALAND FD Secretary I Grono Bay Track 1 Dec 1981 C.F.Butcher \ Moss and litter 81/190 \ NZ PB \.

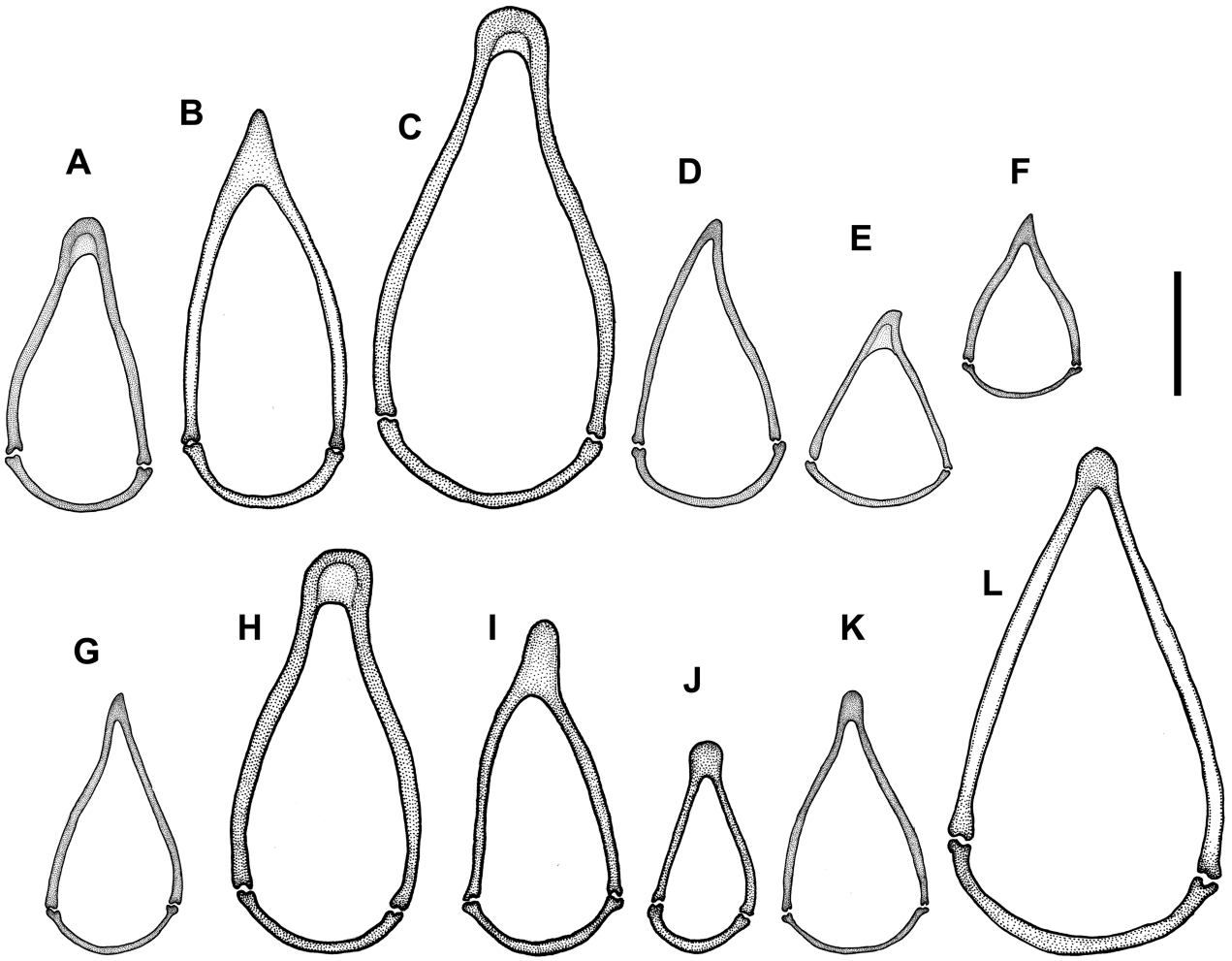

FIGURE 17. Line drawings of ring sclerite of New Zealand *Nesamblyops* species, male genitalia, dorsal aspect. **A**—*N. canaanensis* (Canaan, Nelson, SO), **B**—*N. disjunctus* (Fletchers Creek, Buller, SO), **C**—*N. hobbit* (Mount Domett, Nelson, SO), **D**—*N. karamea* (Karamea River Gorge, Nelson, SO), **E**—*N. kuscheli* (Flora Hut, Mount Arthur, Nelson, SO), **F**—*N. montanus* (Relax Shelter, Mount Robert Ridge, Nelson, SO), **G**—*N. moorei* (Kangaroo Creek, Mawhera Forest, Buller, SO), **H**—*N. ovipennis* (Mount Arthur, Nelson, SO), **I**—*N. rotundicollis* (Onekaka, Nelson, SO), **J**—*N. subcaecus* (Margarets Tarn Lake, Arthur's Pass, Mid Canterbury, SO), **K**—*N. viator* (Secretary Island, Grono Bay, Fjordland, SO), **L**—*N. victoriae* (Capleston, Victoria Range, Buller, SO). Scale = 0.2 mm.

Etymology. The specific epithet is a Latin noun *viator* (meaning "traveler") in apposition in the nominative case and refers to the peculiarities of the species distribution, which range encompasses the islands and mainland of the Fiordland region of New Zealand—carved by glaciers rugged terrain with largely inaccessible interior areas covered by dense primary vegetation.

Type locality. New Zealand, South Island, Fiordland, Resolution Island.

Recognition. Adults of this species (Fig. 11B) are practically indistinguishable from the adults of many *Nesamblyops* species based on external characters (e.g., Figs 10A–B) and are distinguished from them by the structure of the male genitalia.

Description. Small for genus (SBL range 1.52–1.78 mm, mean 1.69±0.065 mm, n=24).

Habitus. Body form (Fig. 11B) moderately convex, elongate ovoid, general proportions wide (WE/SBL 0.39±0.008), head moderately wide relative to pronotum (WH/WPm 0.75±0.015), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.73±0.020).

Color. Body color rufotestaceous, appendages testaceous.

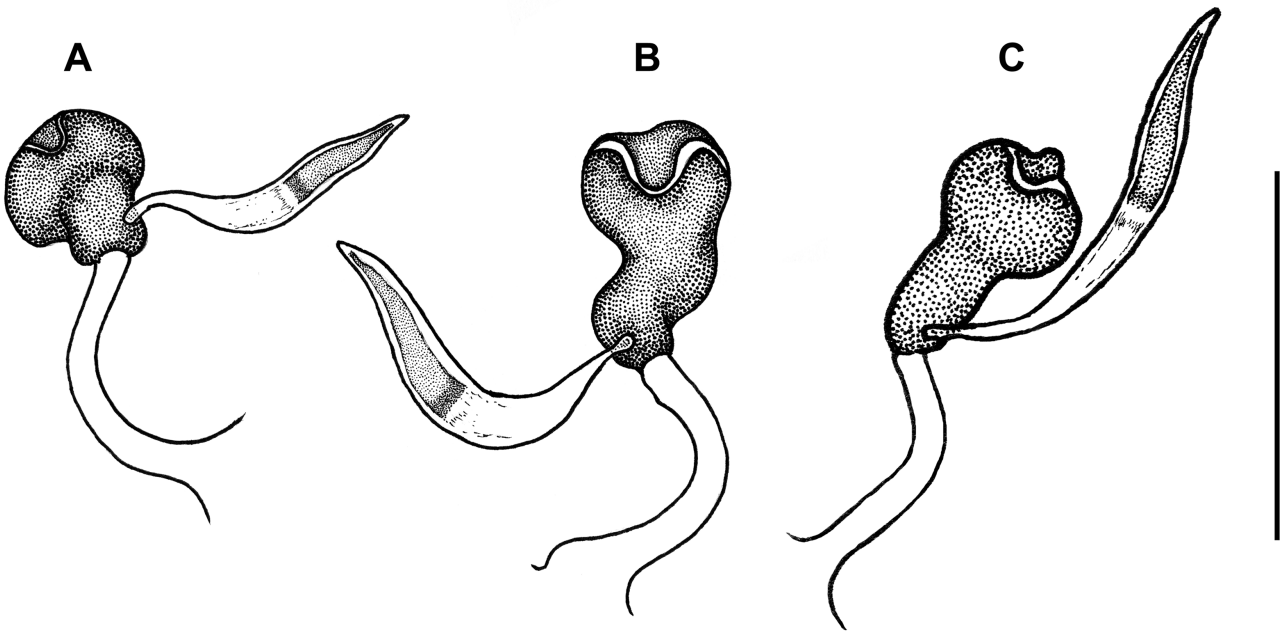

FIGURE 18. Line drawings of spermatheca of New Zealand *Nesamblyops* species. **A**—*N. magnificus* (Allison Reserve, Akatore, Dunedin, SO), **B**—*N. rotundicollis* (Parahamoi, Nelson, SO), **C**—*N. subcaecus* (Lake Kaniere Scenic Reserve, Mount Tuhua, Westland, SO). Scale = 0.1 mm.

Prothorax. Pronotum (Fig. 13E) moderately long in comparison to elytra (LP/LE 0.40±0.012) and slightly transverse (WPm/LP 1.20±0.023), with lateral margins strongly and rectilinear constricted posteriorly (WPm/WPp 1.34±0.031). Anterior angles indistinct, posterior angles obtuse (120–130°), widely rounded. Width between posterior angles equals width between anterior angles (WPa/WPp 1.00±0.031). Basal margin slightly convex.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.60±0.007) and moderately wide (WE/LE 0.66±0.014). Humeri completely rounded. Lateral margins slightly divergent at basal third, subparallel at middle and evenly rounded to apex in apical third.

Male genitalia. Median lobe of aedeagus (Fig. 16F) slightly arcuate and barely twisted. Shaft slightly enlarged at basal third, slightly tapering toward apex in apical two thirds. Apex slightly curved downward with rounded tip of moderate size. Apical orifice short, occupies one fifth of the shaft length. Ventral margin of median lobe slightly convex at middle part and slightly concave before the apex. Walls of shaft with two groups of poriferous canals in apical and basal parts of shaft. Dorsal copulatory sclerites represented by one dorsal membraneous field of distinctive shape (Fig. 16F). V-contour and rC-sclerite lacking. Left paramere (Fig. 16D) comparatively narrow, with slightly attenuated apex, bearing only two long setae. Right paramere (Fig. 16E) narrow, of moderate length, bearing two long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17K.

Female internal genitalia. Not examined.

Geographical distribution. The range of the species occupies the southwest corner of the South Island and comprises the central part of the Fiordland National Park (Fig. 23, black circles).

Habitat. Specimens were collected from litter, moss, tussock, and [plant] mats samples.

Relationships. The structure of the male genitalia of *N. viator* suggests its relatedness to the species with reduced and simple armature of the internal sac. In having only one sclerotized field of copulatory sclerites *N. viator* demonstrates affinity to and presumably forms one group with *N. subcaecus.*

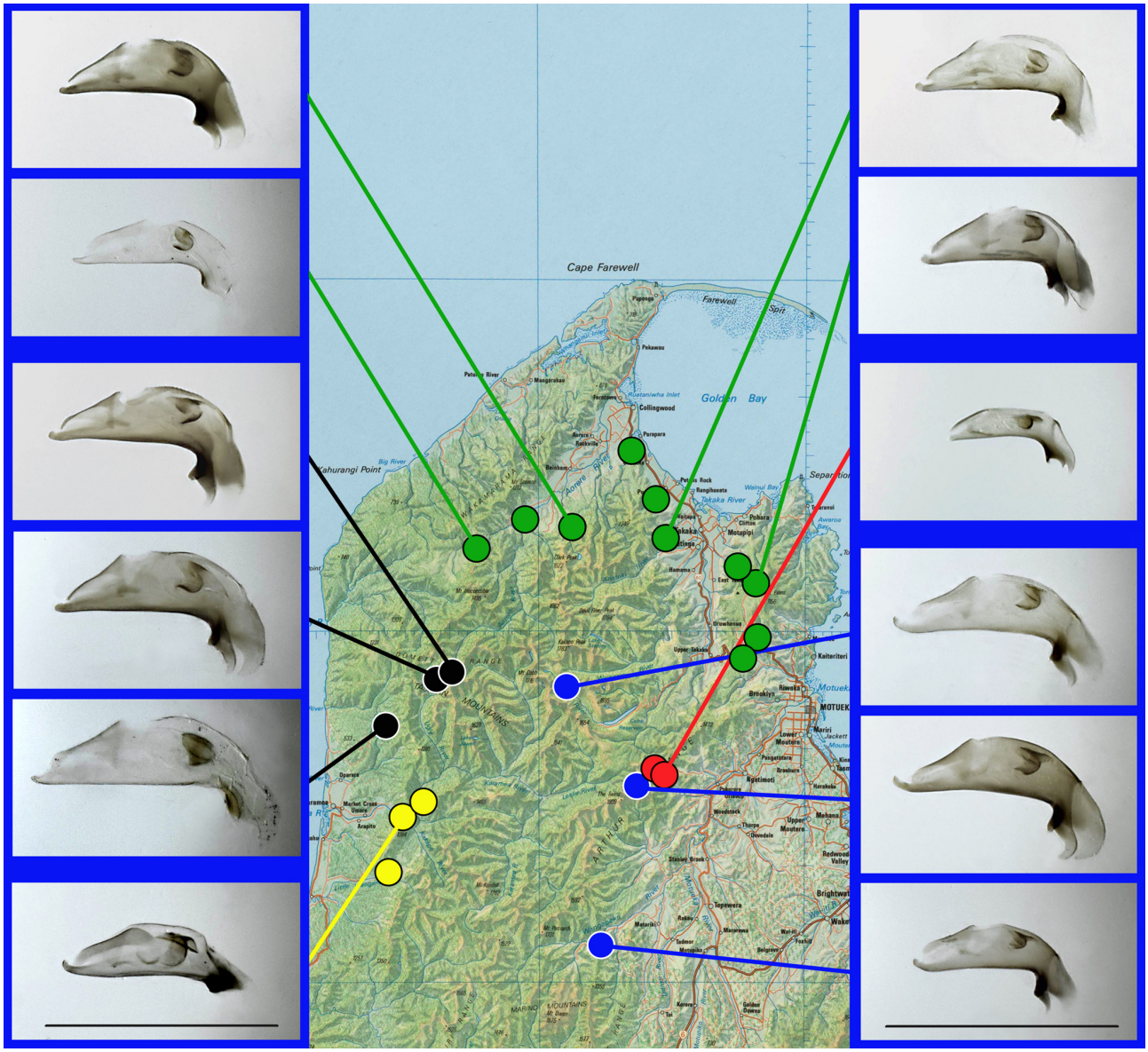

FIGURE 19. Distributional records for the *Nesamblyops* species and images of male median lobe, obtained from specimens, collected in the line-connected with images localities. Green circles—*N. canaanensis*; black circles—*N. hobbit*; blue circles—*N. ovipennis*; yellow circles—*N. karamea*; red circles—*N. kuscheli*. Scale bar = 0.5 mm.

***Nesamblyops victoriae*, sp. nov.**

Figures. 11C, 13F, 16G–I, 17L, 22

Type material. ***HOLOTYPE***, male, in NZAC, labeled: \ NEW ZEALAND, BR Capleston 8 Mar 1972 J.C. Watt \ moss 72/111 \ Beech Forest Utilization Project \ NZ PB \. ***PARATYPES*** (3 specimens, dissected 2 exx.), 2 males labeled: \ 24mi N.Springs Junction 10.2.65 N.A. Walker \ DSIR\ No \ NZ PB \; 1 female labeled: \ NEW ZEALAND, BR Central Val 4.5km SE of Cronadun \ 28 Jan 72 J.C. Watt Litter 72/74 \ Beech Forest Utilization Project \ NZ PB \.

Etymology. The specific epithet is a Latinized eponym in the genitive case and is based on the name of Victoria Range in which the new species was collected.

Type locality. New Zealand, South Island, West Coast, Victoria Range, Capleston area.

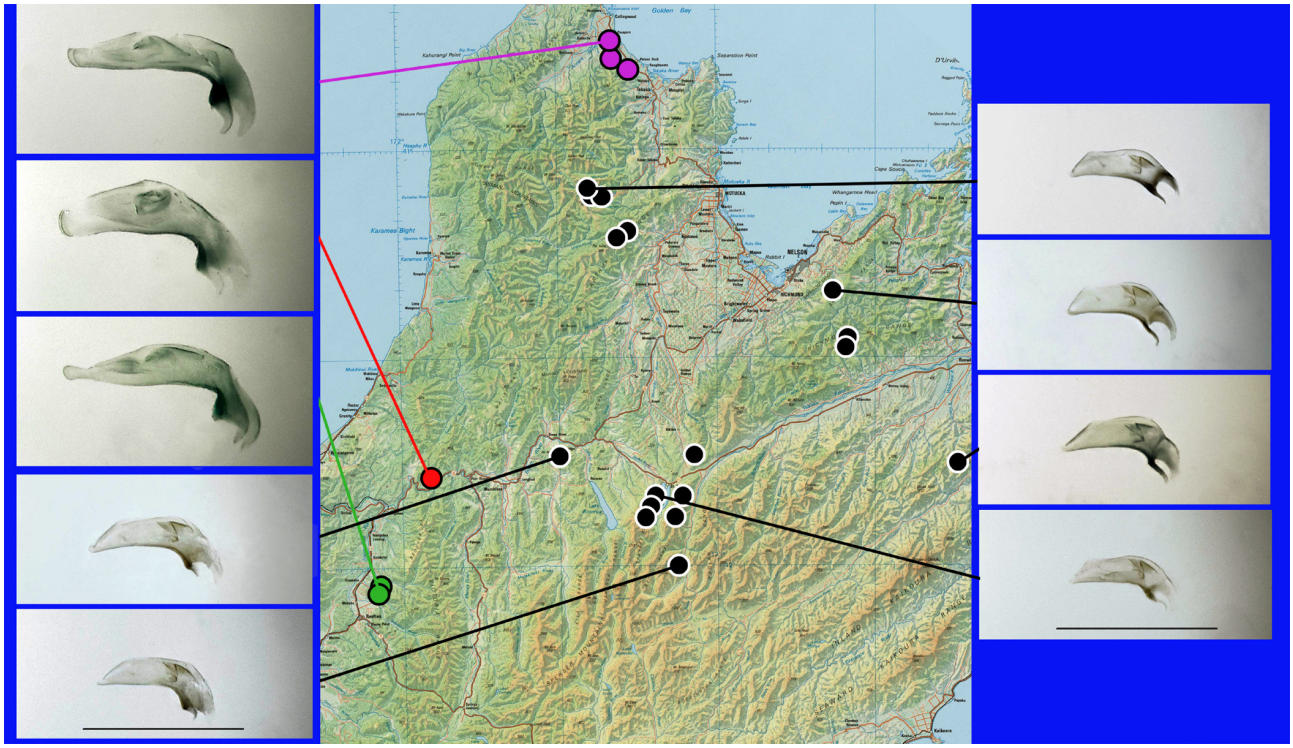

FIGURE 20. Distributional records for the *Nesamblyops* species and images of male median lobe, obtained from specimens, collected in the line-connected with images localities. Green circles—*N. solitarius*; black circles—*N. montanus*; pink circles—*N. rotundicollis*; red circles—*N. subrufus*. Scale bar = 0.5 mm.

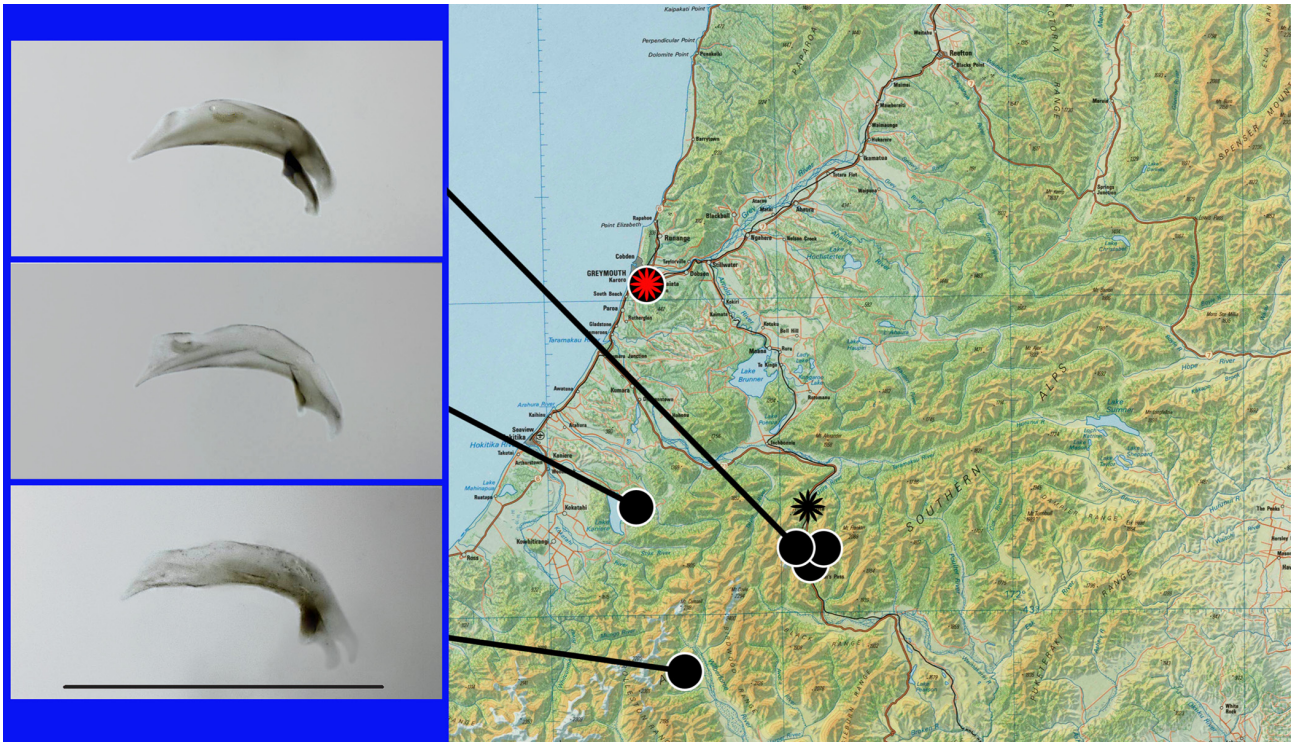

FIGURE 21. Distributional records for the *Nesamblyops subcaecus* and images of male median lobe, obtained from specimens, collected in the line-connected with images localities. Red star—the type locality of *Cillenum subcaecum* Sharp; black star—the type locality of *Tachys coriaceus* Broun. Scale bar = 0.5 mm.

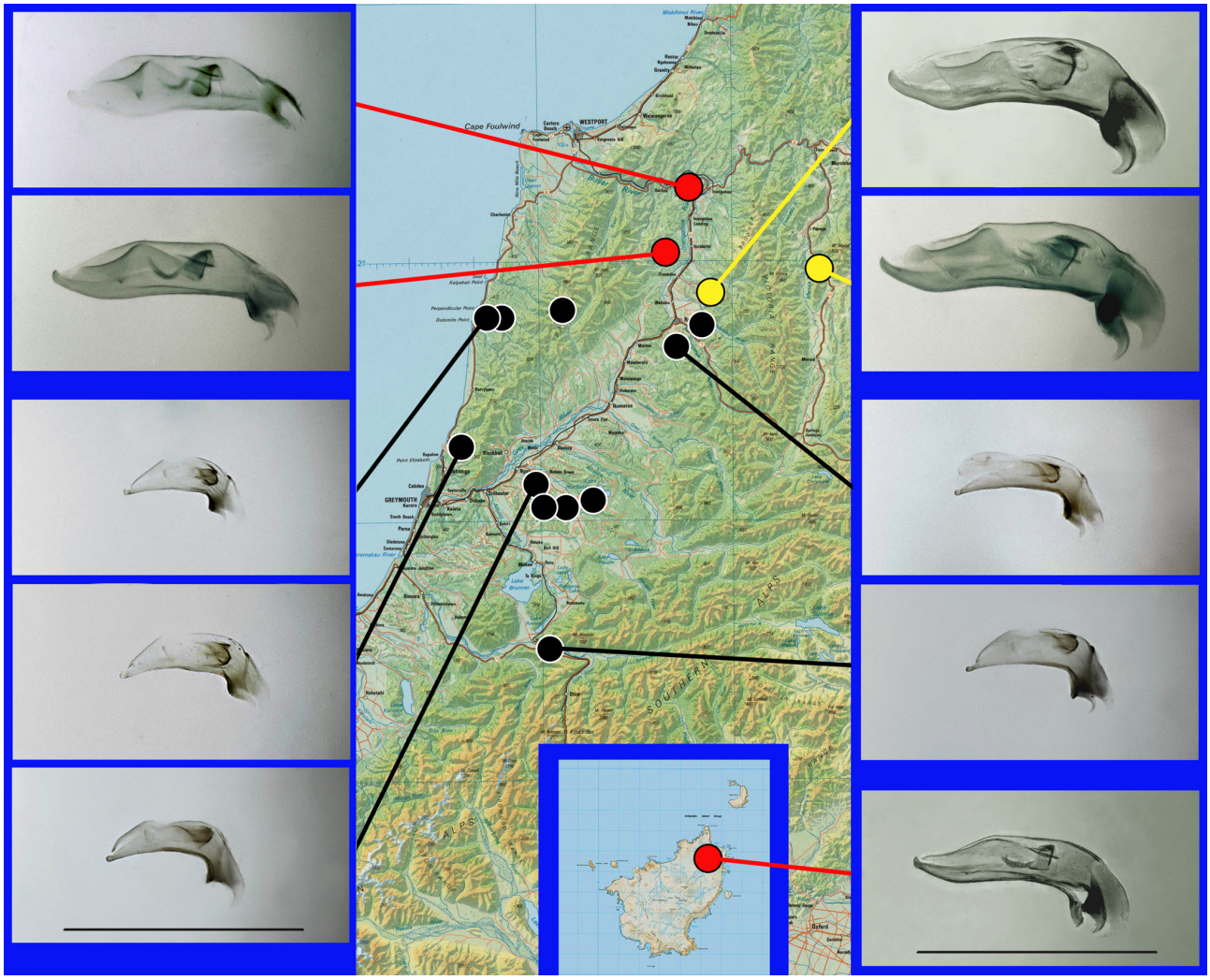

FIGURE 22. Distributional records for the *Nesamblyops* species and images of male median lobe, obtained from specimens, collected in the line-connected with images localities. Yellow circles—*N. victoriae*; black circles—*N. moorei*; red circles—*N. disjunctus*. Scale bar = 0.5 mm.

Recognition. Adults of this species (Fig. 11C) are practically indistinguishable from the adults of some *Nesamblyops* species based on external characters (e.g., Fig. 9B, E) and are distinguished from them by the structures of the male genitalia.

Description. Large for genus (SBL range 1.96–2.11 mm, mean 2.06±0.068 mm, n=4).

Habitus. Body form (Fig. 11C) markedly convex, elongate ovoid, general proportions wide (WE/SBL 0.41±0.008), head narrow relative to pronotum (WH/WPm 0.66±0.023), proportions of pronotum in comparison to elytra average for genus (WPm/WE 0.76±0.025).

Color. Body color piceobrunneous, appendages brunneous.

Prothorax. Pronotum (Fig. 13F) moderately long in comparison to elytra (LP/LE 0.43±0.013) and moderately transverse (WPm/LP 1.22±0.027), with lateral margins moderately and rectilinear constricted posteriorly (WPm/WPp 1.29±0.027). Anterior angles indistinct, posterior angles obtuse (107–111°), rounded. Width between posterior angles greater than between anterior angles (WPa/WPp 0.84±0.015). Basal margin almost rectilinear, slightly convex at middle.

Elytra. Ovoid, narrowly depressed along suture, comparatively long (LE/SBL 0.59±0.006) and moderately wide (WE/LE 0.69±0.019). Humeri completely rounded. Lateral margins slightly divergent at basal third, subparallel at middle and evenly rounded to apex in apical third.

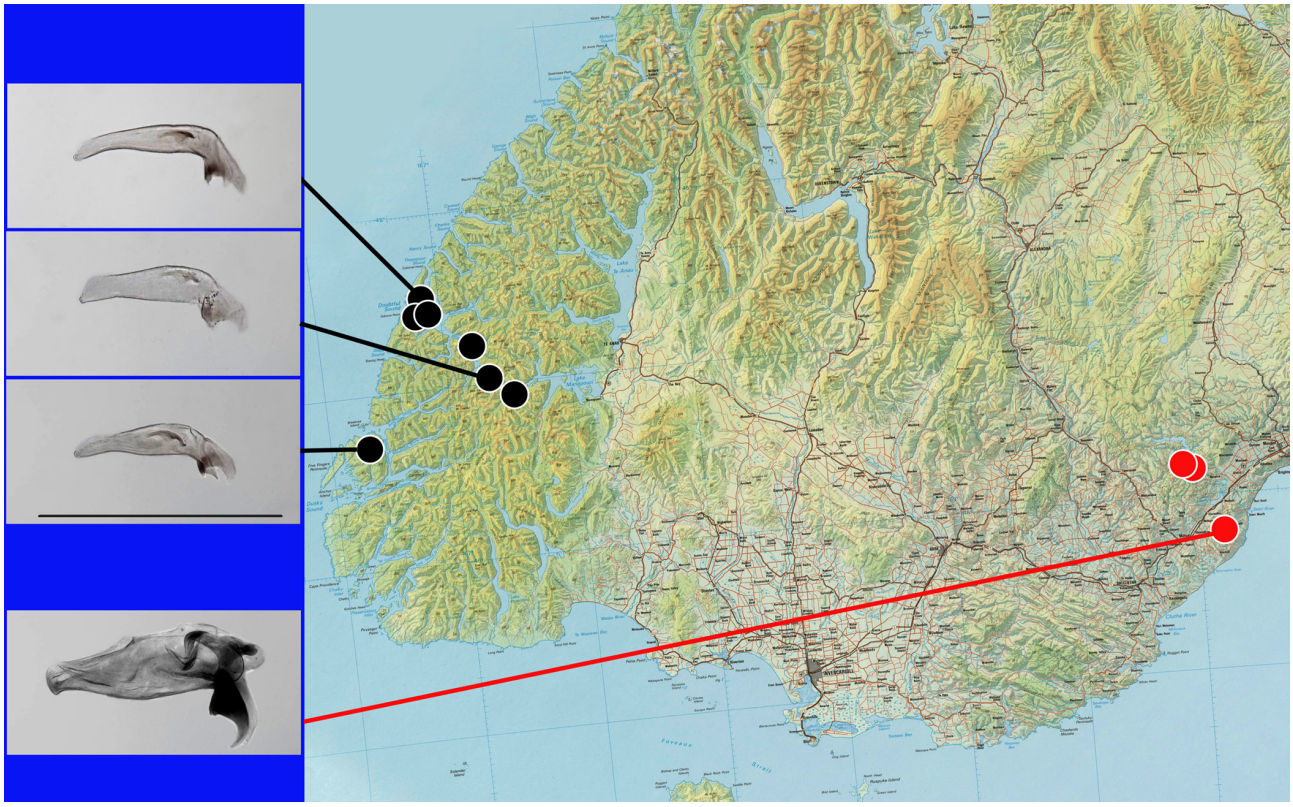

FIGURE 23. Distributional records for the *Nesamblyops* species and images of male median lobe, obtained from specimens, collected in the line-connected with images localities. Black circles—*N. viator*; red circles—*N. magnificus*. Scale bar = 0.5 mm.

Male genitalia. Median lobe of aedeagus (Fig. 16I) moderately arcuate and moderately twisted. Shaft subparallel basally, slightly tapering in apical half. Apex curved dorsally with narrowly rounded tip. Apical orifice of moderate length occupies one third of the shaft length. Ventral margin of median lobe straight in basal half and convex in apical half; after apical convexity ventral margin obliquely ascending toward upturned tip of apex. Walls of shaft with numerous poriferous canals scattered in apical and basal parts of shaft. Dorsal copulatory sclerites consist of rC-sclerite with long ventral branch, V-contour of moderate size, and also with small curved sclerite positioned mid-apically from rC-sclerite (Fig. 16I). Left paramere (Fig. 16G) comparatively wide, with attenuate apex, bearing three long setae. Right paramere (Fig. 16H) narrow, of moderate length, bearing three long setae, which are slightly shorter than the length of paramere. Ring sclerite as in Fig. 17L.

Female internal genitalia. Not examined.

Geographical distribution. The species was collected in three localities situated in the western and eastern foothills of Victoria Range at the northern part of the West Coast region, South Island (Fig. 22, yellow circles).

Habitat. Specimens were collected from moss and litter samples.

Relationships. The structure of the male genitalia of *N. victoriae* suggests its close relatedness to *N. disjunctus*. Both species form a small and distinctive group.

Acknowledgements

I am grateful to the staff of the Louisiana State Arthropod Museum, LSU, Baton Rouge, USA, including Curator, Victoria M. Bayless and the former director, Christopher E. Carlton, for their diversified assistance and patience that made this paper possible, and, especially, for permission to use the Museum's equipment. I appreciate help with SEM imaging provided by the staff of the former Microscopy Center at Louisiana State University School of Veterinary Medicine (Baton Rouge, LA). I also would like to thank Richard A.B. Leschen (Landcare Research, Auckland, New Zealand) for the loan of specimens in his care.

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