

Fig. S1. Apical spine numbering, terminology and position in Rhabdophoridae, after Fitness *et al.* (2015). Dorsal view, showing cross-sectional relationship of each potential spine on femora and tibiae. Positions are indicated as prolateral (anterior facing), retrolateral (posterior facing), inferior (ventral facing) and superior (dorsal facing).

English translation of the original description from the German language in:

Karny H.H. 1937. *Genera Insectorum* 206: 230.

Isoplectron aciculatum sp. nov. – Background colour light rusty brown, dorsum and legs finely dark marbled, metanotum and abdominal tergites on both sides with a rather thin sooty longitudinal stripe, which is more sharply delimited on the inside than on the outside. On either side of this stripe, each body segment is decorated with dense, weak, fading grey longitudinal lines. Scapes of antennae very large, touching one another. The fastigium is strongly flattened and deeply furrowed longitudinally. The lateral lobes of the pronotum are much longer than wide, with a linear inferior margin that is almost bent upwards. All legs are covered in rather long, dense hair, the tibiae more so than the femora. The fore- and mid femora are unarmed, only the latter with an interior needle-shaped apical spine. There are two very small spines in the distal half of the hind femora, on the outer edge. The inner edge is armed with three longer spines, the one in the middle approximately twice as long as the remaining two. Hind knee pad projecting forwards into a strong triangular apex, but not armed with any proper spines. The fore- and mid tibiae are unarmed above, while on the ventral surface, besides from the apical spines, they have two thin spines on either side (interior and exterior); these spines are not longer than the hair covering the legs, and are thus hard to spot. The hind tibiae are unarmed below; above they are armed with two rows of a dozen slender spines, each with a dark coloured tip, not much or not at all longer than the hair. The spines in the outer row are somewhat shorter and weaker than the inner ones. Apical spines are relatively short and thick. The hind metatarsus is long, very strongly flattened, with a pair of pointy spines above, near the end (See Figure 1c). The second tarsal segment is armed with two similar spines. The terminal tergite has a similar shape to the ones of *Weta thomsoni* and of *Neonetus variegatus*. The cerci are moderately long and rather strong, and are covered in very long, dense hair. The stili are long and slender, reaching to about the end of the subgenital plate, and have a darker tip, oriented outwards. The male subgenital plate has a central lobe in the shape of a stretched-out rectangle, rounded at the posterior end in the shape of a semi-circle, and with a sharp, linear furrow in the middle. One male from unknown location in the Oxford Museum. No females have been described. Dimensions: male, body length 10,7mm, pronotum 2.7mm, fore femur 6mm, mid femur 5.4mm, hind femur 11mm, hind tibia 12mm. As per this description there is no doubt that this species belongs to the genus *Isoplectron*, and that it therefore originates from New Zealand.

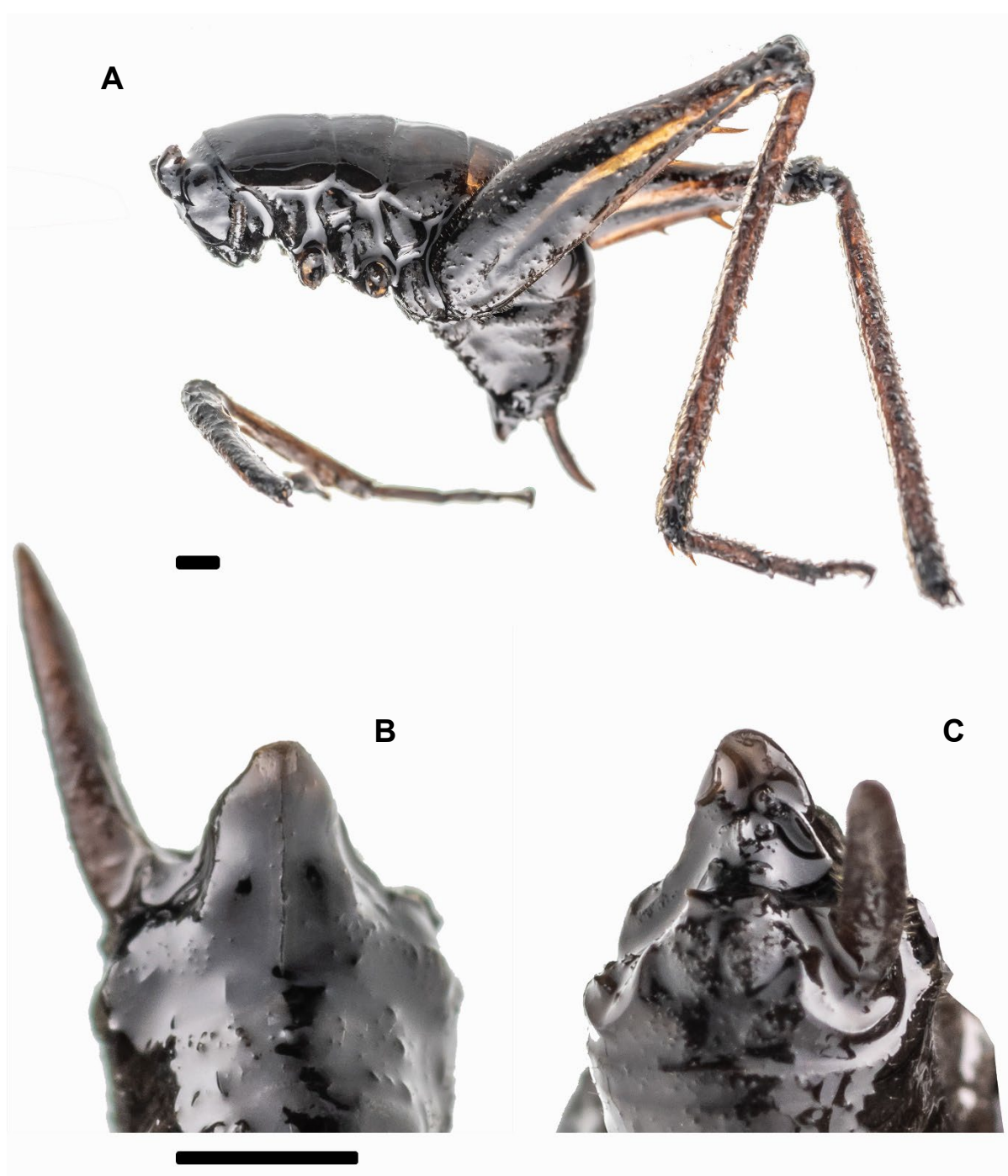


Fig. S2. *Isoplectron armatum* Hutton, 1896, adult ♂. Holotype. Dunedin, New Zealand (CMNZ 2021.17.3). **A.** Lateral view of insect. **B.** Ventral view of terminalia (sub-genital plate). **C.** Dorsal view of terminalia. 1mm scale bars

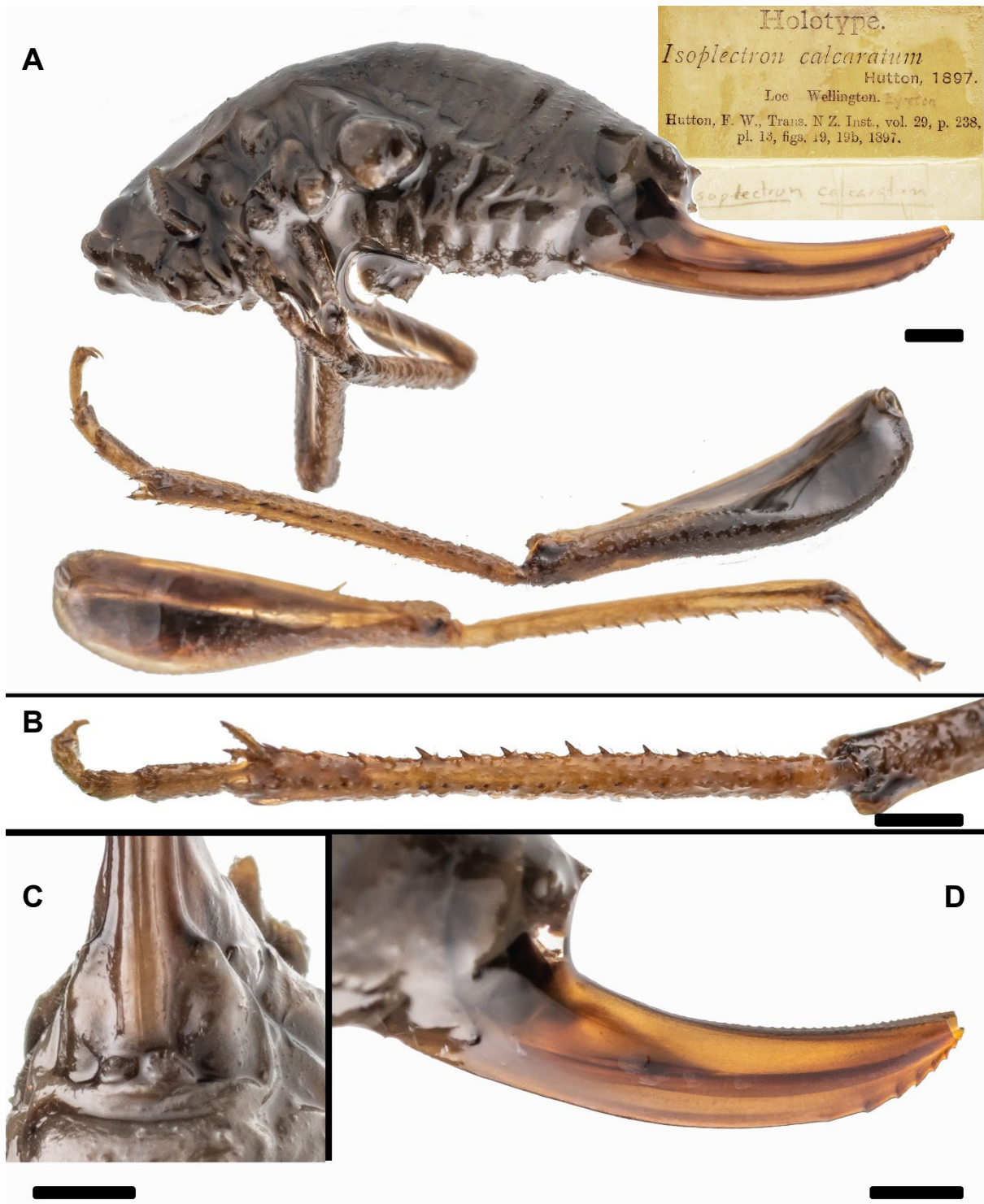


Fig. S3. *Isoplectron calcaratum* Hutton, 1896, adult ♀. Holotype. Eyreton, Canterbury, New Zealand (CMNZ 2021.17.6). **A.** Lateral view of insect. **B.** Dorsal view of left hind tibia. **C.** Sub-genital plate. **D.** Lateral view of ovipositor. 1mm scale bars.



Fig. S4. A. *Isoplectron aciculatum* Karny, 1937, adult ♂. Holotype. New Zealand (OUMNH ORTH097). Image © Oxford University Museum of Natural History, published with permission. 5mm scale bar. **B.** Extract from the Hudson Collection's Orthoptera catalogue. Museum of New Zealand Te Papa Tongarewa (NMNZ), Wellington.

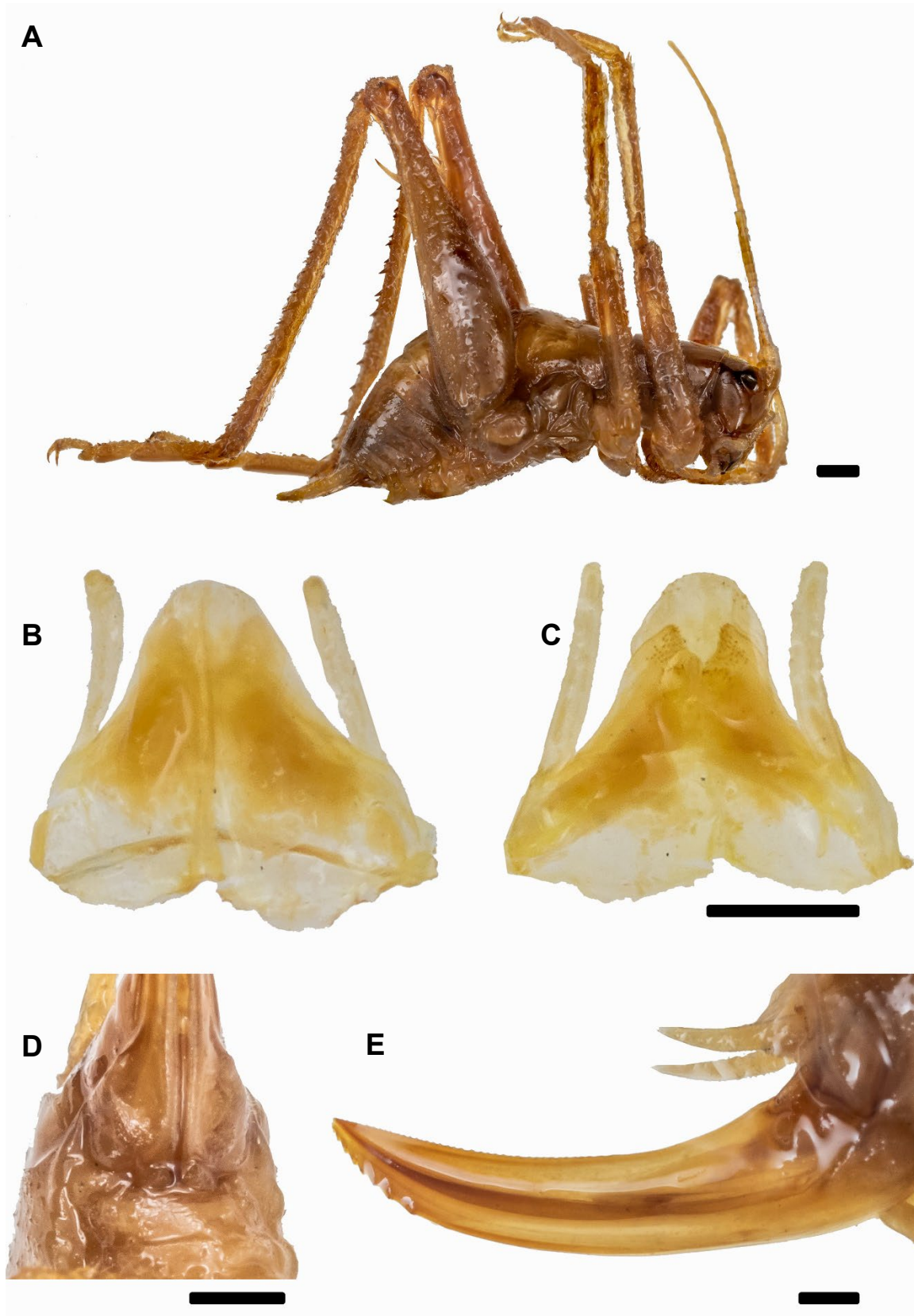


Fig. S5. *Setascutum ohauensis* Richards, 1972, type specimens. **A – C.** Adult ♂. Holotype. Lake Ōhau, New Zealand (OMNZ IV7928). **A.** Lateral view of insect. **B.** Ventral view of terminalia. **C.** Dorsal view of terminalia. **D, E.** Adult ♀. Allotype. Lake Ōhau, New Zealand (OMNZ IV7929). **D.** Subgenital plate. **E.** Lateral view of ovipositor. 1mm scale bars.

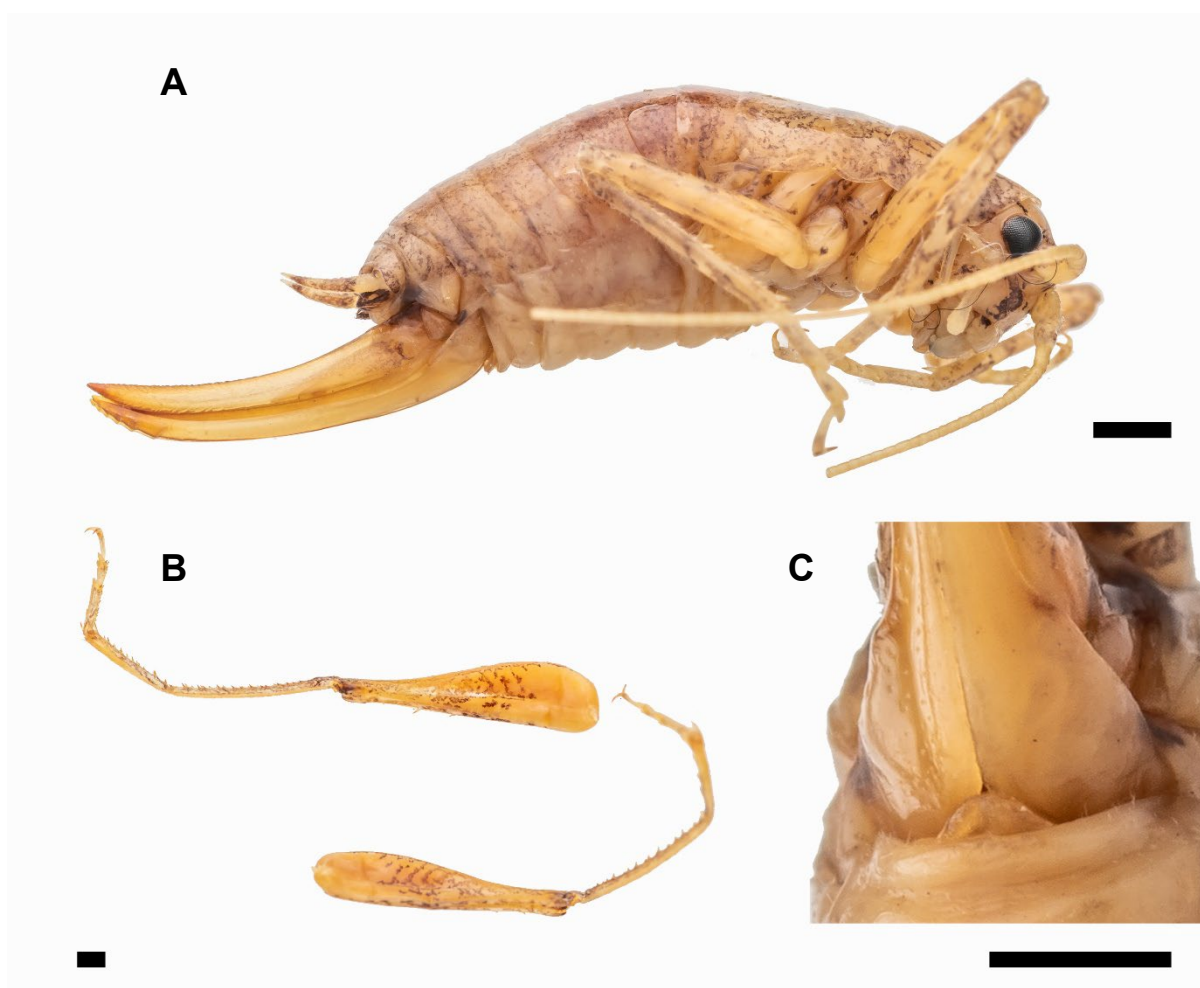


Fig. S6. *Setascutum pallidum* Richards, 1972, adult ♀. Holotype. Duffers Saddle, Old Woman Range, Otago (NZAC 03015582). **A.** Lateral view of insect. **B.** Hind legs. **C.** Subgenital plate. 1mm scale bars.

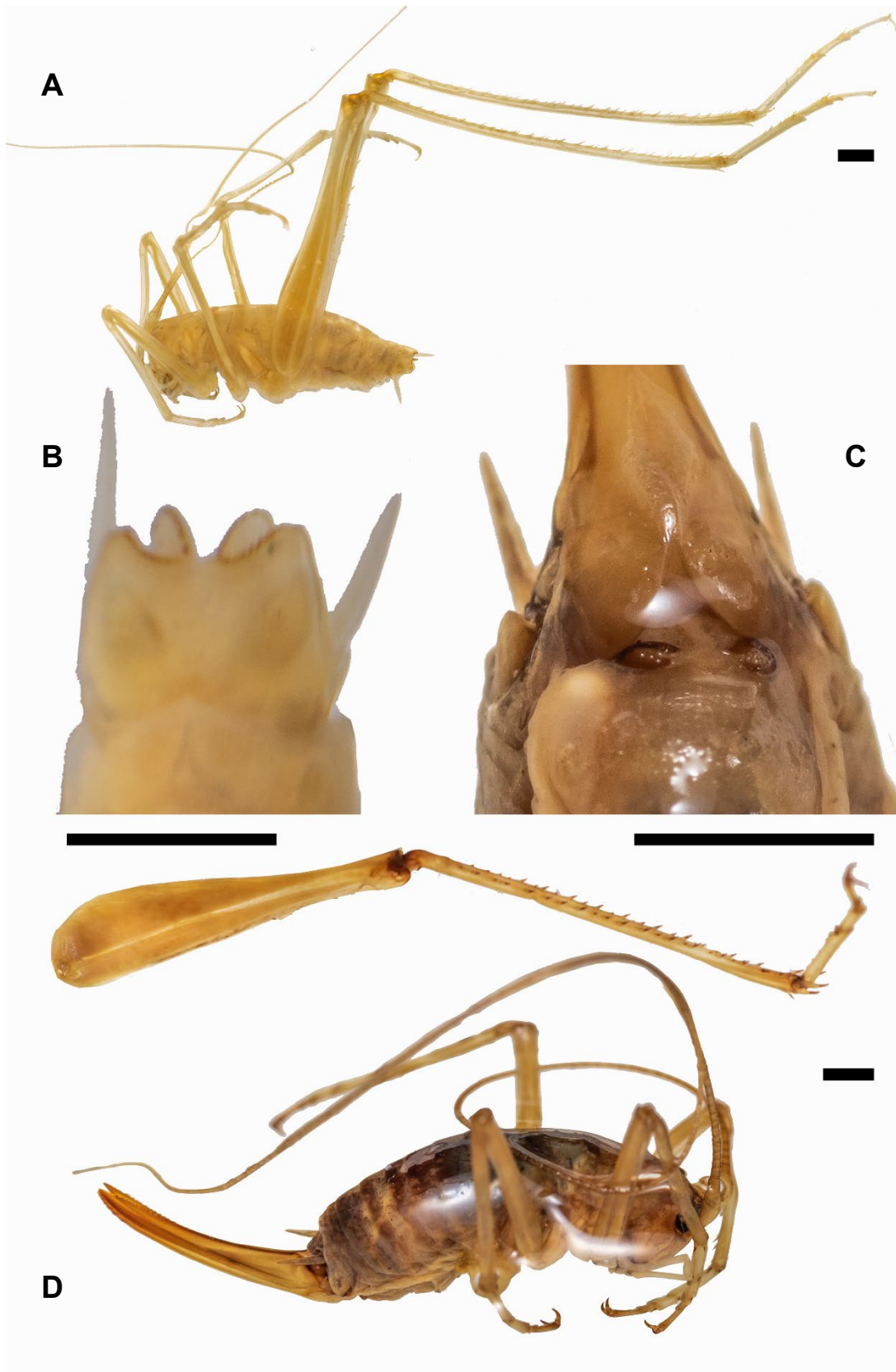


Fig. S7. *Petrotettix serratus* Richards, 1972, type specimens. **A, B.** Adult ♂. Holotype. Mt Binsler, Cass (CMNZ 000223). **A.** Lateral view of insect. **B.** Dorsal view of terminalia. **C, D.** Adult ♀. Paratype. Mt St Patrick, St James Range (CMNZ 000224). **C.** Subgenital plate. **D.** Lateral view of insect, and hind leg. 2mm scale bars.

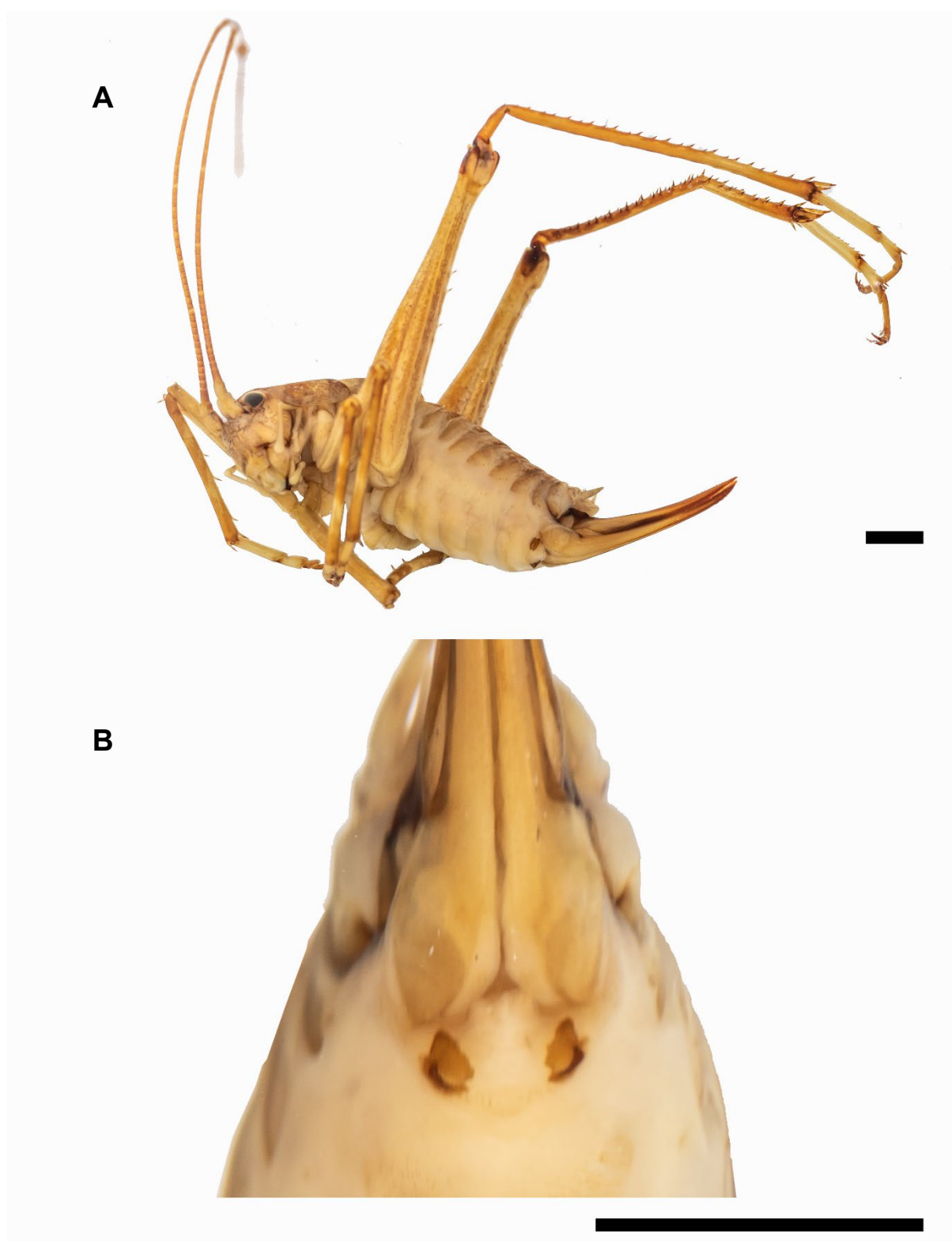


Fig. S8. *Petrotettix spinosus* Richards, 1972, adult ♀. Holotype. Hamilton Peak, Craigieburn Range (CMNZ 000219). **A.** Lateral view of insect. **B.** Subgenital plate. 2mm scale bars.

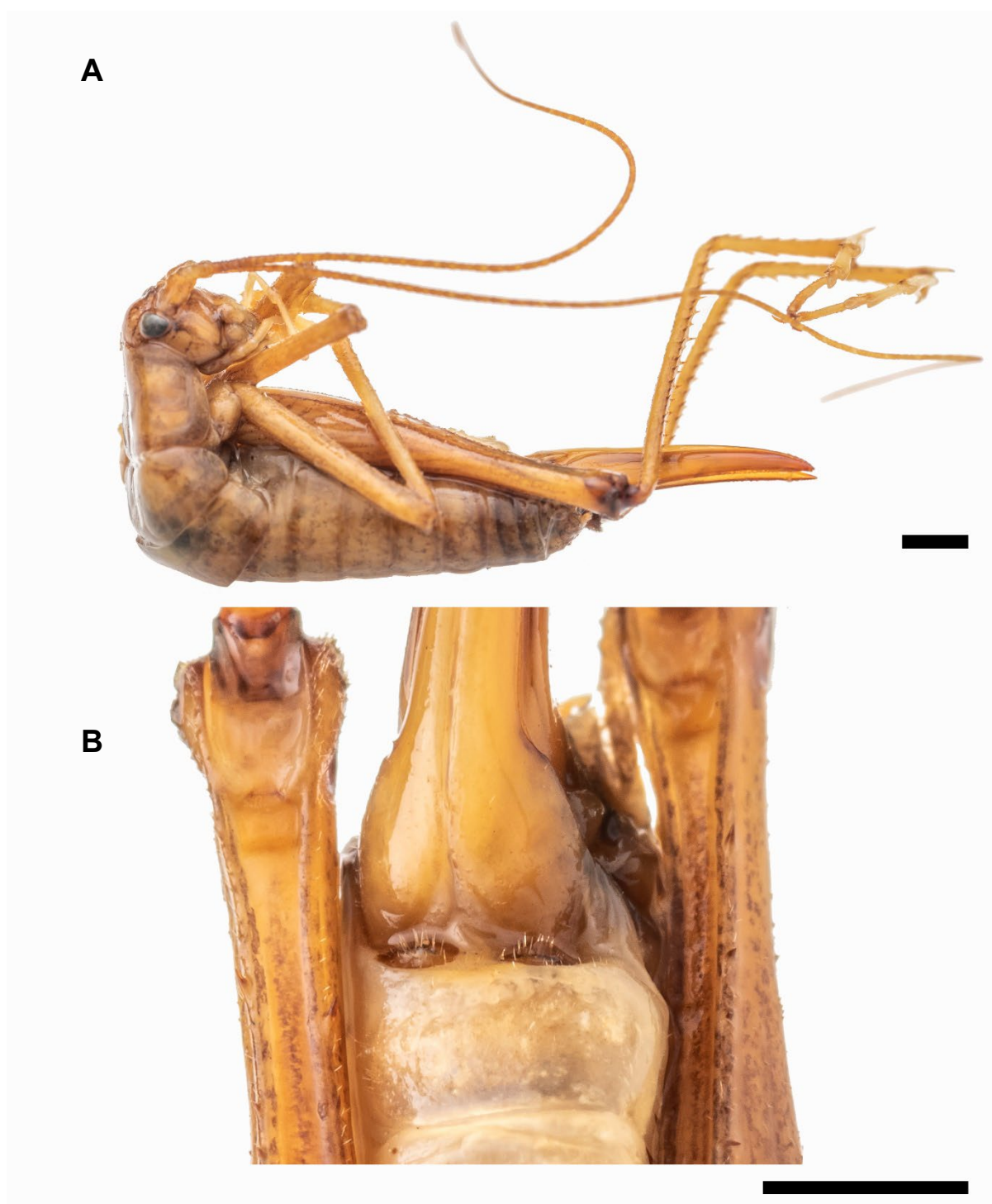


Fig. S9. *Petrotettix cupolaensis* Richards, 1972, adult ♀. Holotype. Cupola Basin, Travers Range (NZAC 03016359). **A.** Lateral view of insect. **B.** Subgenital plate. 2mm scale bars.

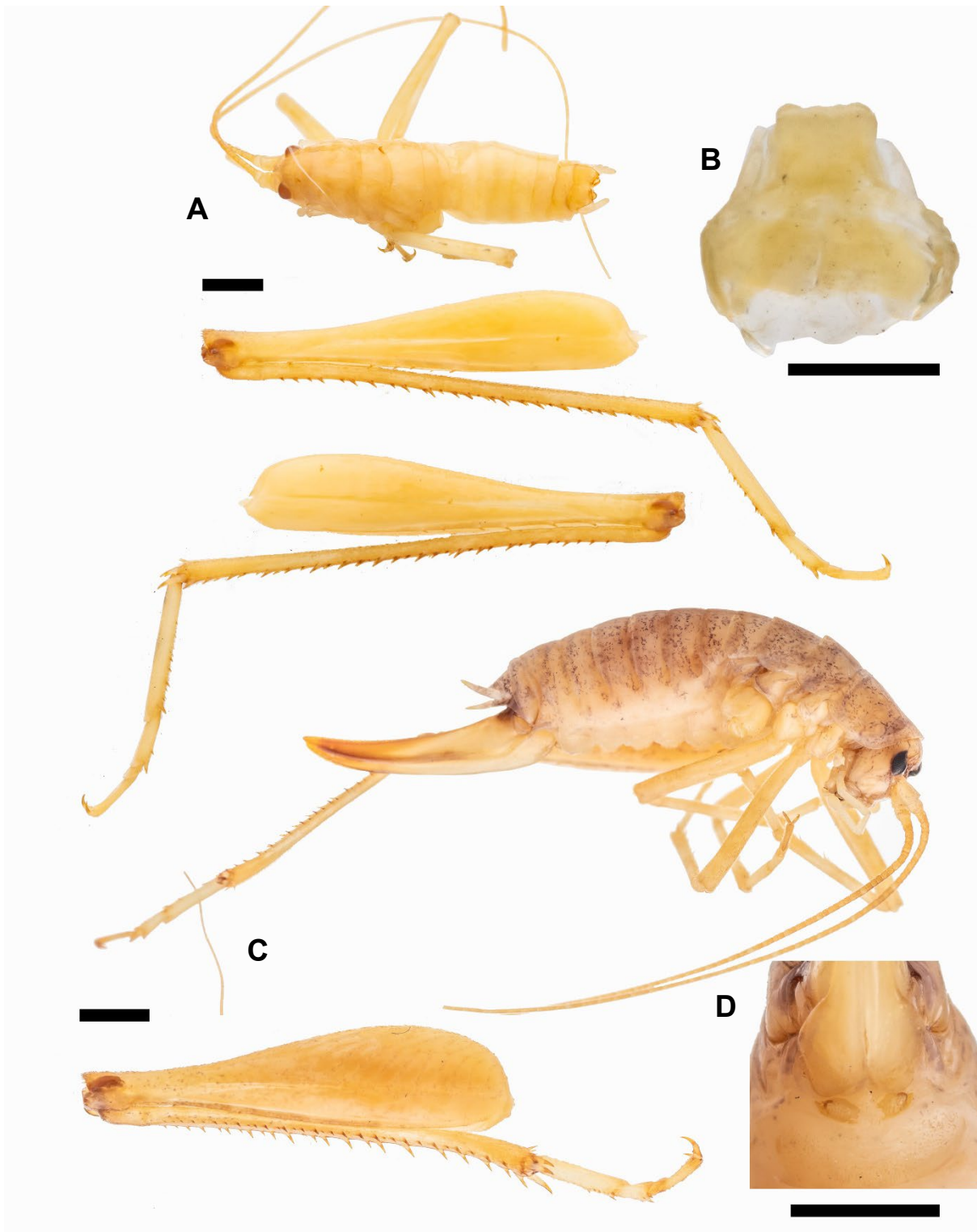


Fig. S10. *Petrotettix nigripes* Richards, 1972, type specimens. Mt Altimarloch, Marlborough. **A, B.** Adult ♂. Holotype. **A.** Dorsal view of insect, with legs detached (NZAC 03016360). **B.** Subgenital plate (NZAC 03015544). **C, D.** Adult ♀. Allotype (NZAC 03015510). **C.** Lateral view of insect, with leg detached. **D.** Subgenital plate. 2mm scale bars.

Table S1. Material examined of *Isoplectron armatum armatum* Hutton, 1896. All specimens collected in New Zealand. Collector abbreviations: BT = Bianca Trewick, BTS = Briar Taylor-Smith, DH = Danilo Hegg, EXMT = Edward (Ted) Trewick, FWH = Frederick Wollaston Hutton, JG = Julia Goldberg, JW = Jim Whitfield, MF = M. Francis, MMD = Marie McDonald, MMR = Mary Morgan-Richards, OUSSA = Otago University Science Students Association, PMJ = Peter Johns, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
DN (Dunedin)	1♂	Dunedin	45.9°S, 170.5°E				1896 or earlier	FWH	CMNZ	2021.17.3 (Holotype)
NC (North Canterbury)	1♀	Eyretton, Canterbury	43.4°S, 172.5°E	50			1896 or earlier	FWH	CMNZ	2021.17.6 (<i>Isoplectron calcaratum</i> holotype)
MK (Mackenzie)	1♂	Lake Ōhau	44.2°S, 169.8°E	500			May 1958	OUSSA	OMNZ	IV7928 (<i>Setascutum ohauensis</i> holotype)
MK (Mackenzie)	1♀	Same as above							OMNZ	IV7929 (<i>Setascutum ohauensis</i> allotype)
SL (Southland)	1♂	Kāmahī Reserve, Edendale	46.32143°S, 168.73513°E	60	On tree trunk in native forest	Night search + Insect net	13 Nov. 2016	DH	MPN GenBank	CW3447 PP155178
FD (Fiordland)	1 nymph	Eglinton River mouth	45.16355°S, 167.82449°E	200	On tree trunk in native forest	Casual find	24 Dec. 2018	DH	MPN	CW4283
DN (Dunedin)	1♀	Brockville, Dunedin	45.8705°S, 170.4615°E	250	On path	Casual find	21 Jun. 1998	SAT	MPN	CW168
DN (Dunedin)	1♂	Same as above			Inside house	Casual find	13 Apr. 2007	BT	MPN	CW1920
DN (Dunedin)	1♂, 1♀	Frasers Gully, Dunedin	45.861°S, 170.461°E	200			17 Apr. 2017	SAT & MMR	MPN	CW3470, CW3471
DN (Dunedin)	1♀	Ōpoho, Dunedin	45.85431°S, 170.53385°E	130	On tree trunk in sub-urban garden	Night search + Insect net	30 Nov. 2016	DH	MPN GenBank	CW3449 PP155176
DN (Dunedin)	2♂♂, 1 nymph	Duncan Rd, near Hampden	45.36689°S, 170.72316°E	460	On clay bank		1 Oct. 2016	MMR	MPN	CW3127, CW3128, CW3130
DN (Dunedin)	1♂, 5♀♀, 1 nymph	Staircase Hut track, Waianakarua	45.28210°S, 170.69724°E	420	On tree trunk in native forest	Night search + Insect net	3 Sep. 2016	DH	MPN	CW3159, CW3161, CW4923, CW3165 to CW3168
CO (Central Otago)	3 nymphs	Wye Creek	45.1384°S, 168.7623°E	400	In native forest	Night search	Nov. 2009	MMD	MPN	CW1027, CW1029, CW1030
CO (Central Otago)	1♀	Piano Flat, Waikaia Forest	45.55472°S, 169.02195°E	220	On tree trunk in native forest	Night search + Insect net	5 Mar. 2020	DH	MPN	CW4962
CO (Central Otago)	1 nymph	Nokomai River	45.5148°S, 168.7091°E	300	On willow tree next to river	Night search + Insect net	12 Nov. 2022	DH	MPN GenBank	CW5565 PP155185
OL (Otago Lakes)	hind leg only	Lake Dispute, Wakatipu	45.050°S, 168.544°E	450			Nov. 2004	PMJ	MPN GenBank	CW192 PP155182

Table S1 Continued. Material examined of *Isoplectron armatum armatum* Hutton, 1896. All specimens collected in New Zealand. Collector abbreviations: BT = Bianca Trewick, BTS = Briar Taylor-Smith, DH = Danilo Hegg, EXMT = Edward (Ted) Trewick, FWH = Frederick Wollaston Hutton, JG = Julia Goldberg, JW = Jim Whitfield, MF = M. Francis, MMD = Marie McDonald, MMR = Mary Morgan-Richards, OUSSA = Otago University Science Students Association, PMJ = Peter Johns, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
OL (Otago Lakes)	2 x hind leg only	Same as above						MPN	CW193, CW194	
OL (Otago Lakes)	2♂♂	Same as above						MF	MPN	CW251, CW252
OL (Otago Lakes)	4 nymphs	Sam Summers Walking Track	45.0540°S, 168.5305°E	450	In native forest	Night search	Nov. 2009	MMD	MPN	CW1024, CW1025, CW1031, CW1032
OL (Otago Lakes)	1♂	Bush Creek Track, Arrowtown	44.9365°S, 168.8189°E	400	In native forest	Night search	Nov. 2009	MMD	MPN	CW1033
OL (Otago Lakes)	1 nymph	Te Kere Haka Track, Kingston	45.3247°S, 168.7157°E	300	In native forest	Night search	Nov. 2009	MMD	MPN	CW1034
OL (Otago Lakes)	2 nymphs	Lake Sylvan	44.7219°S, 168.3151°E	400	In native forest	Night search	Nov. 2009	MMD	MPN	CW1026, CW1028
OL (Otago Lakes)	2♂♂, 1♀, 3 nymphs	OBHS Lodge, Matukituki River	44.49654°S, 168.77397°E	400	On tree trunk in native forest	Night search + Insect net	5 May 2017	DH	MPN	CW4949, CW3444 to 3446, CW4932, CW4933
OL (Otago Lakes)	1♀	Aspiring Hut track, Matukituki River	44.50131°S, 168.68372°E	400	On large rock	Night search + Insect net	5 May 2017	DH	MPN	CW3771
OL (Otago Lakes)	1♂	Aspiring Hut, Matukituki River	44.47580°S, 168.65914°E	460	On beech tree branch	Night search + Insect net	6 May 2017	DH	MPN GenBank	CW3454 PP155181
OL (Otago Lakes)	1♂	Same as above						MPN	CW3999	
OL (Otago Lakes)	3♀♀	South Mavora Lake	45.31441°S, 168.17702°E	630	On tree trunk in native forest	Night search + Insect net	14 Mar. 2018	DH	MPN	CW3802, CW4927, CW4928
OL (Otago Lakes)	2♀♀	South Mavora Lake	45.29922°S, 168.17931°E	630	On tree trunk in native forest	Night search + Insect net	25 Jun. 2020	DH	MPN	CW4929, CW4930
OL (Otago Lakes)	1 nymph	Muddy Creek, Rees River	44.69636°S, 168.46955°E	520	On tree trunk in native forest	Night search + Insect net	6 Sep. 2018	DH	MPN	CW4083
MK (Mackenzie)	1♂	Parsons Bush, Lake Ōhau	44.24971°S, 169.81942°E	540	On tree trunk in native forest	Night search + Insect net	14 May 2017	DH	MPN GenBank	CW3506 PP155184
MK (Mackenzie)	6♂♂, 5♀♀	Same as above						MPN	CW3503 to 3505, CW3507, CW3508, CW5120 to 5125	
MK (Mackenzie)	1♂, 1♀	Governors Bush, Mt Cook Village	43.73758°S, 170.09640°E	750	On twig in native forest	Night search + Insect net	20 Oct 2017	DH	MPN GenBank	CW3617, CW3705 PP155177, PP155180

Table S1 Continued. Material examined of *Isoplectron armatum armatum* Hutton, 1896. All specimens collected in New Zealand. Collector abbreviations: BT = Bianca Trewick, BTS = Briar Taylor-Smith, DH = Danilo Hegg, EXMT = Edward (Ted) Trewick, FWH = Frederick Wollaston Hutton, JG = Julia Goldberg, JW = Jim Whitfield, MF = M. Francis, MMD = Marie McDonald, MMR = Mary Morgan-Richards, OUSSA = Otago University Science Students Association, PMJ = Peter Johns, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code	
MK (Mackenzie)	1♂	Same as above							MPN	CW4960	
MK (Mackenzie)	1♂	Same as above						15 May 2018	DH	MPN	CW4961
SC (South Canterbury)	1♂	Raincliff Reserve, Ōpihi River	44.16157°S, 170.99234°E	150	On <i>Griselinia littoralis</i> tree trunk	Night search + Insect net	2 Jul. 2016	DH	MPN GenBank	CW3112 PP155175	
SC (South Canterbury)	1♂, 1♀	Same as above							MPN	CW3113, CW3114	
SC (South Canterbury)	1♂	Pioneer Park, Ōpihi River	44.14562°S, 170.95329°E	240	On tree trunk in native forest	Night search + Insect net	27 Nov. 2022	DH	MPN	CW5554	
SC (South Canterbury)	4♂♂, 2♀♀, 1 nymph	Otaio Gorge	44.52335°S, 170.92860°E	330	On tree trunk in native forest	Night search + Insect net	18 Mar. 2018	DH	MPN	CW3938, CW5114 to 5119	
SC (South Canterbury)	2♂♂, 2♀♀	Peel Forest	43.89631°S, 171.23491°E	460	On tree trunk in native forest	Night search + Insect net	2 Oct. 2020	DH	MPN	CW4964 to 4967	
SC (South Canterbury)	4♂♂, 3♀♀, 1 nymph	Peel Forest	43.899°S, 171.238°E	400			24 Feb. 2022	SAT, MMR & EXMT	MPN	CW5417 to CW5424	
MC (Mid Canterbury)	1♀	Cass Station	43.033°S, 171.762°E	600			26 Feb. 2006	JW	MPN GenBank	CW325 PP155172	
MC (Mid Canterbury)	1♀	Same as above							MPN	CW326	
MC (Mid Canterbury)	1♀, 1 nymph	Wainui, Banks Peninsula	43.817°S, 172.903°E	20		Night search	30 Nov. 2012	BTS & MMR	MPN GenBank	CW2135, CW2195 PP155173, PP155174	
MC (Mid Canterbury)	1♀	Hinewai Reserve, Banks Peninsula	43.81489°S, 173.02740°E	300	On tree branch in native forest	Night search + Insect net	22 Sep. 2018	DH	MPN	CW4924	
MC (Mid Canterbury)	1♂	Hamilton Hut, Harper River	43.12903°S, 171.62762°E	800	On tree trunk in native forest	Night search + Insect net	12 Sep. 2020	DH	MPN	CW4963	
NC (North Canterbury)	2♀♀	Tiromoana Bush Walk, Waipara	43.09185°S, 172.85077°E	220	On clay bank on side of track	Night search + Insect net	27 Sep. 2018	DH	MPN	CW4925, CW4926	
NC (North Canterbury)	1♀	Tweedies Gully, Gore Bay	42.86225°S, 173.30737°E	20	In blackberry shrub	Night search + Insect net	7 Apr. 2018	DH	MPN GenBank	CW3933 PP155183	
KA (Kaikōura)	1♂	Mt Fyffe Track, Kaikōura	42.349°S, 173.571°E	300			17 Jan. 2006	JG	MPN GenBank	CW391 PP155169	

Table S1 Continued. Material examined of *Isoplectron armatum armatum* Hutton, 1896. All specimens collected in New Zealand. Collector abbreviations: BT = Bianca Trewick, BTS = Briar Taylor-Smith, DH = Danilo Hegg, EXMT = Edward (Ted) Trewick, FWH = Frederick Wollaston Hutton, JG = Julia Goldberg, JW = Jim Whitfield, MF = M. Francis, MMD = Marie McDonald, MMR = Mary Morgan-Richards, OUSSA = Otago University Science Students Association, PMJ = Peter Johns, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code	
KA (Kaikōura)	1♀	Same as above							MPN	CW390	
KA (Kaikōura)	1♂, 1♀	Hinau Track, Kaikōura	42.34977°S, 173.56725°E	200	On tree trunk in native forest	Night search + Insect net	28 Mar. 2016	DH	MPN GenBank	CW2873, CW2874 PP155170, PP155171	
KA (Kaikōura)	3♂♂, 1♀	Same as above							MPN	CW2875 to 2878	
KA (Kaikōura)	1 nymph	Same as above						Jan. 2017	DH	MPN	CW3451
KA (Kaikōura)	1♂, 2♀♀	Same as above						3 Jul. 2020	DH	MPN	CW4934, CW4939, CW4940
KA (Kaikōura)	1♂, 3♀♀	Kaiterau Trail, Kaikōura	42.34121°S, 173.56832°E	560	On tree trunk in native forest	Night search + Insect net	4 Jul. 2020	DH	MPN	CW4935 to 4938	
KA (Kaikōura)	1♂	Puhi Puhi Bush, Kaikōura	42.27014°S, 173.73771°E	160	On tree trunk in native forest	Night search + Insect net	15 Oct. 2020	DH	MPN	CW5156	
KA (Kaikōura)	1 nymph	Kahutara Saddle, Seaward Kaikōura Range	42.32241°S, 173.42870°E	1,200	On clay bank on side of track	Night search + Insect net	1 Apr. 2017	DH	MPN GenBank	CW3452 PP155179	
MB (Marlborough)	1♂, 1♀	Renwick, Wairau Valley	41.52725°S, 173.84760°E	50	On tree trunk near river	Night search + Insect net	28 Sep. 2018	DH	MPN	CW4942, CW4943	
MB (Marlborough)	1♂, 1♀	Renwick, Wairau Valley	41.51304°S, 173.83856°E	50			5 Oct. 2018	SAT & MMR	MPN	CW4296, CW4297	
MB (Marlborough)	7♂♂, 5♀♀	Southerland Stream Track, Blenheim	41.54806°S, 173.96524°E	60			5 Oct. 2018	SAT & MMR	MPN	CW4298 to CW4309	
MB (Marlborough)	1♂	Waihopai River, Wairau Valley	41.52456°S, 173.73504°E	80	On tree trunk near river	Night search + Insect net	19 Oct. 2018	DH	MPN	CW4941	

Table S2. Material examined of *Isoplectron armatum aciculatum* Karny, 1937. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, FWH = Frederick Wollaston Hutton, GVH = George Vernon Hudson, JN = Jan Nisbet, ML = Mike Lusk, MMR = Mary Morgan-Richards, RK = Ruud Kleinpaste, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
WN (Wellington)	1♂	Wellington	41.3°S, 174.8°E				1903 or earlier	GVH	OUMNH	ENT-ORTH097 (Holotype)
HB (Hawke's Bay)	1♀	Mohi Bush Reserve	39.85485°S, 176.89542°E	450	On tree trunk in native forest	Night search + Insect net	10 May 2023	DH	NMNZ MPN	AI.071888 CW5643 (representative female)
WN (Wellington)	1♂ Sub-adult	Wellington	41.3°S, 174.8°E				1896 or earlier	FWH	CMNZ	2021.17.7 (<i>Isoplectron calcaratum</i> paratype)
WN (Wellington)	1♀	Ahumairangi Town Belt, Wellington	41.26896°S, 174.76929°E	250	In <i>Veronica</i> shrub	Night search + Insect net	9 Apr. 2022	DH	MPN	CW5606
WN (Wellington)	1♀	Queen Elizabeth II Park, Paekākāriki	40.96758°S, 174.97745°E	40	In wētā motel on tree trunk		10 Jul. 2016	JN	MPN GenBank	CW3033 PP155156
WN (Wellington)	1♂, 2♀♀, 2 nymphs	Same as above							MPN	CW3029 to CW3032, CW3034
WN (Wellington)	1♂	Turitea Road, Palmerston North	40.41496°S, 175.66401°E	120	On the ground	Casual find	28 Aug. 2004	SAT	MPN	CW139
WN (Wellington)	1♂	Same as above			In wētā motel on tree trunk		3 Apr. 2016	MMR & SAT	MPN GenBank	CW2869 PP155155
WN (Wellington)	1♂	Same as above							MPN	CW2868
WN (Wellington)	1♂, 1♀	Same as above					19 Mar. 2017	MMR & SAT	MPN GenBank	CW4624, CW4625 PP155162, PP155154
WA (Wairarapa)	1♀	Bideford	40.86653°S, 175.86795°E	150	On rotting log		18 Sep. 2004	MMR & SAT	MPN GenBank	CW156 PP155159
WA (Wairarapa)	1♂, 1♀	Same as above							MPN	CW154, CW155
RI (Rangitikei)	1♀	Big Hill Stream Track, Ruahine Range	39.58789°S, 176.33173°E	500			2011	ML	MPN	CW1634
HB (Hawke's Bay)	1♂	Cape Sanctuary, Cape Kidnappers	39.66073°S, 177.04288°E	160	In rifleman nest box		14 Mar. 2011	ML	MPN GenBank	CW1626 PP155161
HB (Hawke's Bay)	1♂	Same as above			Under kānuka bark		16 May 2011	ML	MPN GenBank	CW1635 PP155158
HB (Hawke's Bay)	1♂	Same as above					14 Jun. 2011	ML	MPN GenBank	CW1961 PP155157

Table S2 Continued. Material examined of *Isoplectron armatum aciculatum* Karny, 1937. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, FWH = Frederick Wollaston Hutton, JN = Jan Nisbet, MB = Malcolm Burr, ML = Mike Lusk, MMR = Mary Morgan-Richards, RK = Ruud Kleinpaste, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
HB (Hawke's Bay)	2♀♀	Same as above					Sep. 2011	ML	MPN	CW1809A, B
HB (Hawke's Bay)	1♂	Kuripapango Track, Kaweka Range	39.380°S, 176.334°E	500			27 Feb. 2012	ML	MPN	CW1884
HB (Hawke's Bay)	1♀	Lorenbrey, Kahurānaki Rd	39.8200°S, 176.8465°E	160			Sep. 2011	ML	MPN	CW2075
HB (Hawke's Bay)	1♂	Ngaruroro River terrace	39.36934°S, 176.32052°E	520	Mānuka / kānuka forest		11 Mar. 2014	ML	MPN GenBank	CW2657 PP155160
GB (Gisborne)	1♂	Okitu Bush Scenic Reserve	38.66506°S, 178.09982°E	50		Photograph only	9 Mar. 2023	RK	iNaturalist	150680236
TO (Taupō)	1♂	Marshalls Road, Ohakune	39.39469°S, 175.39605°E	580	On tree trunk on road side	Night search + insect net	14 May 2023	DH	MPN GenBank	CW5647 PP155167
TO (Taupō)	1♀	Same as above					5 Apr. 2023	DH	MPN	CW5644
TO (Taupō)	1♂♀ ¹	Same as above					7 May 2023	DH	MPN GenBank	CW5645 PP155165
TO (Taupō)	3♀♀	Same as above			In wētā motel		12-14 May 2023	DH	MPN GenBank	CW5648 to CW5650 PP155166, PP155168, PP155164
TO (Taupō)	1♂	Marshalls Road, Ohakune	39.39518°S, 175.39726°E	580	On tree trunk on road side	Night search + insect net	13 May 2023	DH	MPN GenBank	CW5646 PP155163

¹ gynandromorph

Table S3. Material examined of *Isoplectron bicolor* sp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, M = Miriam ?.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
NN (Nelson)	1♂	Cave Brook, Goulard Downs	40.89153°S, 172.35449°E	620	On tree trunk	Night search + insect net	4 Feb. 2018	DH	NMNZ MPN	AI.071889 CW3757 (Holotype)
NN (Nelson)	1♀	Chaffey Hut, Cobb River	41.09600°S, 172.57535°E	880	On tree trunk	Night search + insect net	26 Dec. 2020	DH	NMNZ MPN	AI.071890 CW5196 (Paratype)
BR (Buller)	1♀	Nina Hut, Nina Valley	42.46573°S, 172.32202°E	760	In hut sink	Photograph only	15 Mar 2015	M	iNaturalist	1909084
NN (Nelson)	1 nymph	Same as holotype					20 Apr. 2016	DH	MPN GenBank	CW2991 PP155151
NN (Nelson)	1♂	Same as holotype							MPN GenBank	CW3758 PP155152
NN (Nelson)	1♂	Mt Arthur Tablelands	41.18500°S, 172.64370°E	1,180	Up beech tree	Night search + insect net	8 Feb. 2018	DH	MPN GenBank	CW3760 PP155153
NN (Nelson)	1♂	Same as above					24 Dec. 2020	DH	MPN	CW5346
NN (Nelson)	3 nymphs	Same as paratype							MPN	CW5195, CW5197, CW5198
NN (Nelson)	1♂	Same as paratype					5 Jan. 2022	DH	MPN	CW5357

Table S4. Material examined of *Isoplectron pallidum* (Richards, 1972) comb. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, DvW = Donald van der Westhuizen, JSD = John Stewart Dugdale, LC = Lorraine Cook, MMD = Marie McDonald, PMJ = Peter Johns, TJ = Tony Jewell.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
CO (Central Otago)	1♀	Duffers Saddle, Old Woman Range	45.1689°S, 169.0757°E	1,250	In crevice on rock tor		12 Sep. 1968	JSD	NZAC	03015582 (Holotype)
DN (Dunedin)	1♂	Staircase Hut track, Waianakarua River	45.28210°S, 170.69724°E	400	On tree trunk	Night search	3 Sep. 2016	DH	NMNZ MPN	AI.071891 CW4948 (representative male)
DN (Dunedin)	1♀	Same as above							MPN GenBank	CW3163 PP155125
DN (Dunedin)	1♀	Mt Cargill, Dunedin	45.81242°S, 170.55488°E	620	On rocky outcrop	Night search	22 Nov. 2016	DH	MPN GenBank	CW3448 PP155123
DN (Dunedin)	1♂, 1♀	Same as above							MPN	CW5604, CW5605
CO (Central Otago)	1♂	Same as holotype				Night search + insect net	26 Nov. 2016	DH	MPN GenBank	CW3486 PP155122
CO (Central Otago)	1♂, 1♀, 2 nymphs	Same as holotype							MPN	CW3458, CW3485, CW3487, CW3488
CO (Central Otago)	4♂♂, 3♀♀, 1 nymph	Same as holotype				Night search + insect net	7 May 2017	DH	MPN	CW3439 to CW3442, CW5384 to CW5387
CO (Central Otago)	1♂, 1♀	Nevis Road	45.16186°S, 169.10122°E	1,120	In rock crevice on tor	Night search + insect net	26 Nov. 2016	DH	MPN	CW5382, CW5383
CO (Central Otago)	1 nymph	Mt. Rosa Track, Queenstown	45.045°S, 168.963°E		In wētā motel		30 Nov. 2006	LC & PMJ	MPN	CW703
CO (Central Otago)	2 nymphs	Nevis Bluff	45.042°S, 169.012°E	400			Nov. 2009	MMD	MPN	CW1040, CW1042
CO (Central Otago)	1♂	Alexandra	45.256°S, 169.404°E	250	On rock tor		Dec. 2013	TJ	MPN GenBank	CW2577 PP155121
CO (Central Otago)	1♂, 1♀	Same as above							MPN	CW2578, CW2579
CO (Central Otago)	1 nymph	Earnsclough Tailings Reserve, Alexandra	45.24230°S, 169.36039°E	130	On willow tree next to river	Night search + insect net	18 Nov. 2022	DH	MPN GenBank	CW5553 PP155124
CO (Central Otago)	1♂, 1♀, 2 nymphs	Sutton Salt Lake, Middlemarch	45.57555°S, 170.08818°E	250	On rock tor	Night search + insect net	23 Feb. 2021	DH	MPN	CW5209, CW5210, CW5602, CW5603
CO (Central Otago)	1♀	Danseys Pass Road	44.96188°S, 170.32864°E	650	On rock slabs at edge of river	Night search	7 May 2016	DH	MPN GenBank	CW3014 PP155127

Table S4 Continued. Material examined of *Isoplectron pallidum* (Richards, 1972) comb. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, DvW = Donald van der Westhuizen, JSD = John Stewart Dugdale, LC = Lorraine Cook, MMD = Marie McDonald, PMJ = Peter Johns, TJ = Tony Jewell.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
CO (Central Otago)	2 nymphs	Same as above							MPN	CW3015, CW3016
CO (Central Otago)	1♂	Mt Kyeburn, Danseys Pass	44.95412°S, 170.31028°E	1,160	On rock bluffs	Night search + insect net	16 Jan. 2017	DH	MPN GenBank	CW3456 PP155128
CO (Central Otago)	2♀♀	Same as above							MPN	CW4231, CW4245
CO (Central Otago)	1♀	Mt Kyeburn, Danseys Pass	44.95466°S, 170.31002°E	1,120	On rock bluffs	Night search + insect net	16 Apr. 2017	DH	MPN GenBank	CW3455 PP155126
CO (Central Otago)	1♂, 1♀	Same as above							MPN	CW4246, CW4247
CO (Central Otago)	5♂♂	Crown Range Road	44.98128°S, 168.94333°E	980	On rock tor	Night search + insect net	14 Nov. 2020	DH	MPN	CW5560 to CW5563, CW5601
CO (Central Otago)	1♂	Bendigo	44.96156°S, 169.28727°E	330	Sparse rocks	Casual find	4 Jun. 2023	DvW	MPN	CW5637
CO / OL (Central Otago / Otago Lakes)	1♂	Jollies Hill Pass	45.57260°S, 168.50332°E	400	On pine tree trunk in highway rest area	Casual find	28 Aug. 2020	DH	MPN	CW5113
OL (Otago lakes)	2 nymphs	Skippers Canyon	44.892°S, 168.676°E				Nov. 2009	MMD	MPN	CW1041, CW1043
OL (Otago Lakes)	1♂, 1♀	Mt Iron, Wānaka	44.69332°S, 169.16855°E	320	On tree trunk	Night search + insect net	12 Oct. 2018	DH	MPN	CW4974, CW4975

Table S5. Material examined of *Isoplectron serratum* (Richards, 1972) comb. nov.. All specimens collected in New Zealand. Collector abbreviations: CLB = C.L. Batchelor, DH = Danilo Hegg, IM = Ian Millar, JSD = John Stewart Dugdale, PMJ = Peter Johns, RW = R. Watson, TR = Troy Watson.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
NC (North Canterbury)	1♂	Mt Binsler, Cass	43.038°S, 171.857°E	1,000 – 1,200	Among scree		24 Feb. 1963	PMJ	CMNZ	000223 (Holotype)
MB (Marlborough)	1♀	Mt St Patrick, St James Range	42.439°S, 172.748°E	1,200	Among scree		30 Oct. 1962	PMJ	CMNZ	000224 (Paratype)
MC (Mid Canterbury)	1♀	Hamilton Peak, Craigieburn Range	43.123°S, 171.690°E	1,500 – 1,800	Rocky ridge		15 Dec. 1968	RW	CMNZ	000219 (<i>Petrotettix spinosus</i> holotype)
BR (Buller)	1♀	Cupola Basin, Travers Range	41.980°S, 172.720°E	1,860			Dec. 1965	CLB	NZAC	03016359 (<i>Petrotettix cupolaensis</i> holotype)
MB (Marlborough)	1♂	Mt Altimarloch, Black Birch Range	41.744°S, 173.806°E	1,360			6 Feb. 1970	JSD	NZAC	03016360, 03015544 (<i>Petrotettix nigripes</i> holotype)
MB (Marlborough)	1♀	Mt Altimarloch, Black Birch Range	41.744°S, 173.806°E	1,360			6 Feb. 1970	JSD	NZAC	03015510 (<i>Petrotettix nigripes</i> allotype)
MC (Mid Canterbury)	2♂♂, 1♀	Mt Somers	43.60777°S, 171.36341°E	1,300	Rock bluffs	Night search + insect net	12 Dec. 2020	DH	MPN	CW5583 to CW5585
MC (Mid Canterbury)	1♂	Round Hill Creek, Taylor Range	43.43186°S, 171.29781°E	1,450	Rock bluffs	Night search + insect net	4 Dec. 2016	DH	MPN GenBank	CW3188 PP155132
MC (Mid Canterbury)	3♂♂, 2♀♀	Same as above							MPN	CW3189 to CW3193
MC (Mid Canterbury)	1♂, 1♀	Mount Ida	43.22°S, 171.53°E	1,500			3 Dec. 1999		MPN	CW178A, B
MC (Mid Canterbury)	1♀, 2 nymphs	Hamilton Peak, Craigieburn Range	43.11746°S, 171.68554°E	1,750	Rocky ridge	Night search + insect net	12 Feb. 2017	DH	MPN GenBank	CW3274, CW3301, CW3306 PP155142, PP155143, PP155141
MC (Mid Canterbury)	1♂, 8 nymphs	Same as above							MPN	CW3267 to CW3273, CW3275, CW3276
MC (Mid Canterbury)	1♀	The Gap, Torlesse Range	43.25649°S, 171.78426°E	1,440	Rocky outcrop	Night search + insect net	20 Nov. 2016	DH	MPN GenBank	CW3185 PP155144
MC (Mid Canterbury)	2♂♂, 3♀♀	Same as above							MPN	CW3182 to CW3184 CW3186, CW3187
MC / NC (Mid Canterbury / North Canterbury)	1♂, 1♀	Mid Hill, Black Range	43.06201°S, 171.58003°E	1,660	Rocky ridge	Night search + insect net	18 Dec. 2021	DH	MPN	CW5362, CW5363
NC (North Canterbury)	1♀	Spider Web, Organ Range	42.68837°S, 172.502947°E	1,670	Rocky outcrop	Night search + insect net	20 Dec. 2016	DH	MPN GenBank	CW3236 PP155145

Table S5 Continued. Material examined of *Isoplectron serratum* (Richards, 1972) comb. nov.. All specimens collected in New Zealand. Collector abbreviations: CLB = C.L. Batchelor, DH = Danilo Hegg, IM = Ian Millar, JSD = John Stewart Dugdale, PMJ = Peter Johns, RW = R. Watson, TR = Troy Watson.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
NC (North Canterbury)	4♂♂, 1♀	Same as above							MPN	CW3237 to CW3241
BR (Buller)	1 nymph	Angelus Peak, Travers Range	41.89771°S, 172.74426°E	1,650	Rock bluffs	Night search + insect net	7 Jan. 2017	DH	MPN GenBank	CW3255 PP155139
BR (Buller)	2♂♂, 1♀ 2 nymphs	Same as above							MPN	CW3252 to CW3254, CW3256, CW3257
MB (Marlborough)	1♀	Inkerman Ridge, Crimea Range	42.1990°S, 172.8328°E	2,000	On ridge-top		24 Jan. 2012	TW	MPN GenBank	CW2643 PP155148
MB (Marlborough)	1♀	Crimea Creek, Crimea Range	42.2001°S, 172.8356°E	1,880			24 Jan. 2012	IM	MPN GenBank	CW2647 PP155149
MB (Marlborough)	1♂, 1 nymph	Crimea Creek, Crimea Range	42.2020°S, 172.8340°E	1,870			24 Jan. 2012	TW	MPN GenBank	CW2676, CW2677 PP155147, PP155135
MB (Marlborough)	2 nymphs	Same as above							MPN	CW2674, CW2675
MB (Marlborough)	1♀	Berts Creek	42.1180°S, 172.8999°E	1,100			20 Dec. 2011	TW	MPN GenBank	CW2648 PP155146
MB (Marlborough)	1♂	Mt Alexander	41.8219°S, 173.6059°E	1,340			27 Apr. 2006	IM	MPN GenBank	CW412 PP155134
MB (Marlborough)	2 nymphs	Mt Harkness, Black Birch Range	41.76021°S, 173.75181°E	1,640	Summit rocks	Night search + insect net	22 Oct. 2016	DH	MPN	CW3514, CW3515
MB (Marlborough)	1 nymph	Mt Altimarloch, Black Birch Range	41.74389°S, 173.80445°E	1,360	Rocky outcrop	Night search + insect net	23 Oct. 2016	DH	MPN GenBank	CW3141 PP155137
MB (Marlborough)	3 nymphs	Same as above							MPN GenBank	CW3142 to CW3144
MB (Marlborough)	1♀	Same as above					6 Jan. 2017	DH	MPN GenBank	CW3249 PP155140
MB (Marlborough)	2♂♂	Same as above							MPN	CW3250, CW3251
MB (Marlborough)	4♂♂, 3♀♀	Same as above					29 Jan. 2018	DH	MPN	CW5586 to CW5592
MB (Marlborough)	1 nymph	Mt Richmond, Richmond Range	41.47298°S, 173.39135°E	1,600	Rock bluffs	Night search + insect net	21 Oct. 2018	DH	MPN GenBank	CW4125 PP155138

Table S5 Continued. Material examined of *Isoplectron serratum* (Richards, 1972) comb. nov.. All specimens collected in New Zealand. Collector abbreviations: CLB = C.L. Batchelor, DH = Danilo Hegg, IM = Ian Millar, JSD = John Stewart Dugdale, PMJ = Peter Johns, RW = R. Watson, TR = Troy Watson.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
MB (Marlborough)	1♂, 1♀, 1 nymph	Same as above							MPN	CW4124, CW5577, CW5578
MB (Marlborough)	1♂, 1♀	Slaty Peak, Richmond Range	41.48759°S, 173.27426°E	1,520	On ridge-top	Night search + insect net	28 Dec. 2021	DH	MPN	CW5360, CW5361
KA (Kaikōura)	1♀	Turks Head	42.1629°S, 173.2752°E	1,630	Among scree		18 Jan. 2012	TW	MPN GenBank	CW2649 PP155133
KA (Kaikōura)	1♂	Hodder Huts, Awatere River	41.96950°S, 173.63789°E	1,380	Rock bluffs	Night search + insect net	4 Apr. 2018	DH	MPN	CW5579
KA (Kaikōura)	1♂	Kahutara Saddle	42.32217°S, 173.42933°E	1,200	Rock bluffs	Night search + insect net	1 Apr. 2017	DH	MPN GenBank	CW3245 PP155136
KA (Kaikōura)	5♂♂, 6♀♀, 7 nymphs	Same as above							MPN	CW3242 to 3244, CW3246 to 3248, CW3387 to CW3389, CW3407 to CW3410, CW5555 to CW5559

Table S6. Material examined of *Isoplectron maculatum* sp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
SC (South Canterbury)	1♂	Middle Mt Peel	43.86312°S, 171.18167°E	1,350	Rocky outcrop on ridge	Night search + insect net	19 Apr. 2019	DH	NMNZ MPN GenBank	AI.071892 (Holotype) CW5582 PP155130
SC (South Canterbury)	1♀	Same as holotype							NMNZ MPN	AI.071893 CW5580 (Paratype)
SC (South Canterbury)	1♀	Same as holotype							MPN	CW5581
SC (South Canterbury)	1♂, 1♀	Same as holotype					27 May 2023	DH	MPN GenBank	CW5638, CW5641 PP155131, PP155129
SC (South Canterbury)	1♂, 2♀♀	Same as above							MPN	CW5639, CW5640, CW5642

Table S7. Material examined of *Isoplectron virgatum* sp. nov.. All specimens collected in New Zealand. Collector abbreviations: BTS = Briar Taylor-Smith, DH = Danilo Hegg, JJ = Jean Jack.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
BR (Buller)	1♂	Ces Clarke Hut, Paparoa Range	42.29007°S, 171.39307°E	900	On <i>Phormium</i> leaf	Night search + insect net	6 Apr. 2019	DH	NMNZ MPN	AI.071894 (Holotype) CW4421
BR (Buller)	1♀	Same as holotype							NMNZ MPN GenBank	AI.071895 (Paratype) CW4419 PP155107
FD (Fiordland)	1♀	Cleft Creek, Hollyford Valley	44.64813°S, 168.10538°E	100	In native forest	Photograph only	9 Jan. 2023	JJ	iNaturalist	146558750
WD (Westland)	1♀	Jackson Bay	43.97°S, 168.61°E	80	On tree fern	Night search + insect net	1 Nov. 2019	DH	MPN GenBank	CW4666 PP155105
WD (Westland)	2♂♂	Awatuna, Hokitika	42.64905°S, 171.06228°E	40			May 2012	BTS	MPN GenBank	CW2014, CW2016 PP155104, PP155102
WD (Westland)	1♂, 1 nymph	Same as above							MPN	CW2009, CW2013
BR (Buller)	1♂	Bob's Hut, Matakaitaki River West Branch	42.22528°S, 172.48754°E	840	On <i>Astelia</i> leaf	Night search + insect net	6 Jan. 2021	DH	MPN GenBank	CW5394 PP155101
BR (Buller)	1♀	Same as above							MPN	CW5395
BR (Buller)	1♀	Same as holotype							MPN	CW4420
BR (Buller)	1 nymph	Truman Track, Punakaiki	42.09430°S, 171.34349°E	50	On <i>Astelia</i> leaf	Night search + insect net	6 Dec. 2018	DH	MPN GenBank	CW4228 PP155100
NN (Nelson)	1 nymph	Granity Pass, Mt Owen	41.52327°S, 172.56349°E	1,200	On <i>Aciphylla</i> flower	Night search + insect net	9 Jan. 2019	DH	MPN GenBank	CW4290 PP155106
NN (Nelson)	1♀, 1 nymph	Same as above							MPN	CW4289, CW4291
NN (Nelson)	1♂	Cave Brook, Goulund Downs	40.89153°S, 172.35449°E	630	On <i>Astelia</i> leaf	Night search + insect net	4 Feb. 2018	DH	MPN GenBank	CW3776 PP155099
NN (Nelson)	1♀, 1 nymph	Same as above							MPN	CW3775, CW3794
NN (Nelson)	1♂	Heaphy River, Kahurangi NP	40.983°S, 172.114°E	20	On <i>Coprosma</i> shrub	Night search + insect net	20 Feb. 2023	DH	MPN GenBank	CW5622 PP155103

Table S8. Material examined of *Isoplectron ferratum* sp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, EXMT = Edward (Ted) Trewick, MMR = Mary Morgan-Richards, MO = Mike Ogle, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code	
NN (Nelson)	1♂	Cave Brook, Goulund Downs	40.89153°S, 172.35449°E	630	In beech tree canopy	Night search + insect net	4 Feb. 2018	DH	NMNZ MPN	AI.071896 (Holotype) CW4952	
SD (Marlborough Sounds)	1♀	Mt Stokes	41.08747°S, 174.10983°E	1,000	On beech tree	Night search + insect net	17 Nov. 2018	DH	NMNZ MPN GenBank	AI.071897 (Paratype) CW4149 PP155117	
BR (Buller)	2 nymphs	Nina Valley	42.45974°S, 172.36472°E	650	On large rock in forest	Night search + insect net	26 Jan. 2018	DH	MPN GenBank	CW3778, CW3779 PP155112, PP155113	
BR (Buller)	2♂♂, 1♀	Same as above							MPN	CW5607 to CW5609	
NN (Nelson)	1♀	Blue Creek, Mt Owen	41.51561°S, 172.56022°E	1,100	On tree trunk	Night search + insect net	11 Jan. 2019	DH	MPN GenBank	CW5610 PP155114	
NN (Nelson)	1♀	Graham River North Branch	41.19414°S, 172.80776°E	170			19 Dec. 2011	SAT	MPN	CW1800	
NN (Nelson)	1♂	Mt Arthur Track, Mt Arthur	41.19966°S, 172.72180°E	1,180	On tree trunk	Night search + insect net	21 Dec. 2020	DH	MPN	CW5575	
NN (Nelson)	1♂	Salisbury Lodge, Mt Arthur	41.18465°S, 172.64217°E	1,200	On tree trunk	Night search + insect net	24 Dec. 2020	DH	MPN	CW5576	
NN (Nelson)	2♂♂, 3♀♀	Chaffey Hut, Cobb River	41.09531°S, 172.57310°E	900	On tree trunk	Night search + insect net	26 Dec. 2020	DH	MPN	CW5570 to CW5574	
NN (Nelson)	1♂, 1♀	Goulund Downs Hut, Heaphy Track	40.89060°S, 172.35334°E	630	Between sheets of plywood	Casual find	16 Sep. 2005	MO	MPN	CW342, CW343	
NN (Nelson)	1♀	Same as holotype						26 Dec. 2016	DH	MPN GenBank	CW4036 PP155116
NN (Nelson)	1♂, 1♀	Same as holotype						4 Feb. 2018	DH	MPN	CW3774, CW4953
NN (Nelson)	2♂♂	Awaroa, Abel Tasman NP	40.863°S, 173.043°E	10			Jan. 2011	MMR & SAT	MPN	CW1953, CW1954	
NN (Nelson)	1♀	Awaroa, Abel Tasman NP	40.863°S, 173.043°E	10	In sink outside hut	Casual find	18 Jan. 2017	SAT	MPN GenBank	CW3229 PP155110	
NN (Nelson)	1♂, 1♀	Pakawau Bush Rd, Collingwood	40.583°S, 172.657°E	20			27 Jan. 2010	MMR & SAT	MPN	CW1906, CW1907	
NN (Nelson)	1 nymph	Farewell Spit	40.51417°S, 172.75389°E	10	On tree trunk	Night search + insect net	5 Feb. 2018	DH	MPN GenBank	CW3768 PP155111	
NN (Nelson)	1♂, 1♀	Same as above							MPN	CW5599, CW5600	

Table S8. Continued. Material examined of *Isoplectron ferratum* sp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, EXMT = Edward (Ted) Trewick, MMR = Mary Morgan-Richards, MO = Mike Ogle, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
NN (Nelson)	1♀	Cape Farewell	40.50490°S, 172.70925°E	100	Under rimu bark		1 Dec. 2019	EXMT	MPN GenBank	CW4627 PP155115
TK (Taranaki)	1♂	Dawson Falls, Taranaki Mounga	39.330°S, 174.110°E	800			1 Jun. 2008	SAT & MMR	MPN GenBank	CW817 PP155109

Table S9. Material examined of *Isoplectron parallelum* sp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, MMR = Mary Morgan-Richards, RG = Ron Goudswaard, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
WN (Wellington)	1♂	Ahumairangi Town Belt, Wellington	41.26896°S, 174.76929°E	250	In <i>Veronica</i> shrub	Night search + insect net	9 Apr. 2022	DH	NMNZ MPN	AI.071898 CW5595 (Holotype)
WN (Wellington)	1♀	Same data as holotype							NMNZ MPN	AI.071899 CW5597 (Paratype)
WN (Wellington)	2♂♂	Newlands, Wellington	41.233°S, 174.827°E	150	On <i>Eucalyptus</i> tree	Casual find	16 Apr. 2006	SAT	MPN GenBank	CW362, CW363 PP155119, PP155120
WN (Wellington)	1♀	Zealandia Ecosanctuary, Wellington	41.30554°S, 174.73678°E	250			8 May 2006	RG	MPN	CW410
WN (Wellington)	1♀	Rangitautau Reserve, Wellington	41.33716°S, 174.82203°E	60	On <i>Phormium tenax</i> flower	Night search + insect net	16 Oct. 2020	DH	MPN GenBank	CW5131 PP155118
WN (Wellington)	4♂♂, 2♀♀	Same data as holotype							MPN	CW5566 to CW5569, CW5596, CW5598
WN (Wellington)	1♀	Days Bay, Wellington	41.27566°S, 174.90748°E	100	On <i>Melicytus ramiflorus</i> laves	Night search	2 Oct. 2023	SAT	MPN GenBank	CW5657 PP155108

Table S10. Material examined of *Praecatrix silvatica silvatica* gen., sp. et subsp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, MMR = Mary Morgan-Richards, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
NN (Nelson)	1♂	Mt Arthur Tablelands	41.18506°S, 172.64476°E	1,170	On tree trunk in native forest	Night search + insect net	24 Dec. 2020	DH	NMNZ MPN	AI.071900 CW5393 (Holotype)
WD (Westland)	1♀	Smoothwater Bay, South Westland	43.97494°S, 168.59452°E	0	On tree trunk in native forest	Night search + insect net	14 Oct. 2018	DH	NMNZ MPN	AI.071901 CW4137 (Paratype)
OL (Otago Lakes)	1♀	Aspiring Hut, Matukituki Valley	44.47580°S, 168.65914°E	460	On tree trunk in native forest	Night search + insect net	6 May 2017	DH	MPN GenBank	CW3518 PP155094
NC (North Canterbury)	1♀	Casey Hut, Poulter River	42.89625°S, 171.87076°E	600	On tree trunk in native forest	Night search + insect net	1 Oct. 2021	DH	MPN	CW5388
BR (Buller)	1♀	Nina Valley, Lewis Pass	42.46093°S, 172.34196°E	680	Leaf litter in beech forest	Night search + insect net	26 Jan. 2018	DH	MPN GenBank	CW3777 PP155095
BR (Buller)	1♂	Cannibal Gorge, Lewis Pass	42.33964°S, 172.42218°E	820	In native forest	Night search + insect net	25 Apr. 2017	DH	MPN GenBank	CW3453 PP155091
BR (Buller)	1♀	Ces Clarke Hut, Paparoa Range	42.29007°S, 171.39307°E	900	On tree trunk in native forest	Night search + insect net	6 Apr. 2019	DH	MPN	CW4945
NN (Nelson)	1♂	Denniston Plateau	41.73792°S, 171.78861°E	570		Bioblitz	8 Jul. 2012	MMR & SAT	MPN GenBank	CW1767 PP155092
NN (Nelson)	1♂	Mt Arthur Hut	41.19771°S, 172.71606°E	1,280	On tree trunk in native forest	Night search + insect net	21 Dec. 2020	DH	MPN GenBank	CW5390 PP155093
NN (Nelson)	1♂	Mt Arthur Tablelands	41.18500°S, 172.64370°E	1,170	On tree branch in native forest	Night search + insect net	9 Feb. 2018	DH	MPN GenBank	CW3766 PP155096
NN (Nelson)	1♀	Same as above; in copula							MPN	CW4000
NN (Nelson)	1♀	Same data as holotype							MPN GenBank	CW5391 PP155097
NN (Nelson)	1♀	Same data as holotype							MPN	CW5392
NN (Nelson)	1♂	Chaffey Hut, Cobb River	41.09600°S, 172.57535°E	880	On tree trunk in native forest	Night search + insect net	27 Dec. 2020	DH	MPN	CW5389
MB (Marlborough)	1♂	Richmond Saddle	41.47924°S, 173.38111°E	1,200	Hopping on forest floor	Night search + insect net	20 Oct. 2018	DH	MPN GenBank	CW4136 PP155098

Table S11. Material examined of *Praecantrix silvatica lutea* gen., sp. et subsp. nov.. All specimens collected in New Zealand. Collector abbreviations: DH = Danilo Hegg, JT = James Tweed, MMR = Mary Morgan-Richards, SAT = Steve Trewick, TJ = Tony Jewell.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
SL (Southland)	1♂	McLean Falls, Catlins Forest	46.57093°S, 169.34823°E	60	On tree trunk in native forest	Night search + insect net	4 Aug. 2017	DH	NMNZ MPN	AI.071902 (Holotype) CW4947
DN (Dunedin)	1♀	Ōpoho, Dunedin	45.85440°S, 170.53380°E	130	On tree trunk	Night search + insect net	18 Jun. 2022	DH	NMNZ MPN GenBank	AI.071903 (Paratype) CW5564 PP155081
SI (Stewart Island)	1♀	Rakeahua River estuary	46.97496°S, 167.90398°E	0	Underneath rotting log	Photograph only	10 Mar. 2021	JT	iNaturalist	73903375
FD (Fiordland)	1♂	Surprise Bay, Lake Manapouri	45.55036°S, 167.56380°E	180	On tree trunk in native forest	Night search + insect net	18 Nov. 2017	DH	MPN GenBank	CW3782 PP155078
FD (Fiordland)	1♂	Same as above							MPN	CW4944
FD (Fiordland)	1♀	Dock Bay, Lake Te Anau	45.43580°S, 167.67849°E	240	On tree trunk in native forest		Jan. 2014	TJ	MPN GenBank	CW2599 PP155080
SL (Southland)	1 nymph	Same data as holotype							MPN GenBank	CW3784 PP155090
SL (Southland)	1♂, 1♀	Same data as holotype							MPN	CW3901, CW4946
SL (Southland)	1♀	McLennan Range, Catlins Forest	46.48570°S, 169.16642°E	400	On tree trunk in native forest	Night search + insect net	1 Dec. 2018	DH	MPN	CW4951
DN (Dunedin)	1♀	Sullivans Dam, Dunedin	45.80771°S, 170.52375°E	300	On tree trunk in native forest	Night search + insect net	15 Aug. 2019	DH	MPN	CW4451
DN (Dunedin)	1♀	Staircase Hut track, Waianakarua	45.28210°S, 170.69724°E	420	On tree trunk in native forest	Night search + insect net	3 Sep. 2016	DH	MPN GenBank	CW3158 PP155079
DN (Dunedin)	1♀	Same as above							MPN	CW3160
SC (South Canterbury)	1♂	Otaio Gorge	44.52335°S, 170.92860°E	230	On tree trunk in native forest	Night search + insect net	18 Mar. 2018	DH	MPN	CW4931
SC (South Canterbury)	1♂	Claremont Bush Reserve	44.41214°S, 171.08438°E	150	On tree trunk in native forest	Night search + insect net	21 Sep. 2018	DH	MPN	CW4950
SC (South Canterbury)	1♂, 1♀	Peel Forest	43.89657°S, 171.23457°E	460	On tree trunk in native forest	Night search + insect net	3 Oct. 2020	DH	MPN	CW4968, CW4969
KA (Kaikōura)	1♀	Hinau Walk, Kaikōura	42.35082°S, 173.56802°E	200	On tree trunk in native forest	Photograph only	22 Oct. 2016	DH	iNaturalist	4438856

Table S1 Continued. Material examined of *Isoplectron armatum* Hutton, 1896. All specimens collected in New Zealand. Collector abbreviations: BTS = Briar Taylor-Smith, DH = Danilo Hegg, FWH = Frederick Wollaston Hutton, JG = Julia Goldberg, JN = Jan Nisbet, JW = Jim Whitfield, MB = M. Burr, MF = M. Francis, ML = Mike Lusk, MMD = Marie McDonald, MMR = Mary Morgan-Richards, OUSSA = Otago University Science Students Association, PMJ = Peter Johns, SAT = Steve Trewick.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
WN (Wellington)	1♀	Butterfly Creek, Eastbourne	41.298°S, 174.905°E	100			Apr. 2006	SAT & MMR	MPN	CW366

Table S12. Material examined of *Praecantrix saxicola* gen. et sp. nov.. All specimens collected in New Zealand. Collector abbreviations: BS = Brent Sinclair, DH = Danilo Hegg, SAT = Steve Trewick, TJ = Tony Jewell.

Entomological Region	Material	Locality	Coordinates	Elevation m a.s.l.	Micro-habitat	Collecting method	Date	Collector	Institution code	Specimen code
MK (MacKenzie)	1♂	Mt Wakefield, Aoraki / Mt Cook NP	43.71987°S, 170.12763°E	1,450	Broken rocks on ridgeline	Night search + insect net	13 May 2017	DH	NMNZ MPN	AI.071904 (Holotype) CW3521
CO (Central Otago)	1♀	Mt St. Bathans	44.71826°S, 169.77104°E	1,650	On rock bluffs	Night search + insect net	9 Mar. 2019	DH	NMNZ MPN GenBank	AI.071905 (Paratype) CW4550 PP155085
CO (Central Otago)	1♂, 1♀	Mt Kyeburn, Danseys Pass	44.95471°S, 170.30851°E	1,100	In scree among bluffs		Dec. 2013	TJ	MPN GenBank	CW2574, CW2575 PP155088, PP155089
CO (Central Otago)	3♂♂	Same as above							MPN	CW2572, CW2573, CW2576
CO (Central Otago)	1♀	Same as above				Night search + insect net	16 Jan. 2017	DH	MPN GenBank	CW3520 PP155087
CO (Central Otago)	1♀	Awakino Ski-field, St Marys Range	44.78°S, 170.31°E	1,800	In scree		20 Apr. 1998	BS	MPN	CW173
CO (Central Otago)	1♂	Same data as paratype							MPN GenBank	CW4317 PP155086
CO (Central Otago)	2♀♀, 3 nymphs	Same data as paratype							MPN	CW4318 to CW4320, CW4551, CW4552
MK (MacKenzie)	1♂, 1♀	Ahuriri River East Branch	44.27917°S, 169.74279°E	1,720	In scree Among bluffs	Night search + insect net	30 Apr. 2022	DH	MPN	CW5611, CW5612
MK (MacKenzie)	1♀	Mt Wakefield, Aoraki / Mt Cook NP	43.70548°S, 170.12192°E	1,680	On sparsely vegetated ground	Night search	12 Mar. 2016	DH	MPN GenBank	CW2880 PP155084
MK (MacKenzie)	1♂, 1 nymph	Mt Wakefield, Aoraki / Mt Cook NP	43.71063°S, 170.12445°E	1,750	Broken rocks on ridgeline	Night search + insect net	18 Mar. 2017	DH	MPN	CW3332, CW3540
MK (MacKenzie)	1♀, 1 nymph	Same as above					17 Apr. 2017	DH	MPN	CW3946, CW3947
MK (MacKenzie)	1♀	Mt Wakefield, Aoraki / Mt Cook NP	43.71798°S, 170.12875°E	1,540	Broken rocks on ridgeline	Night search + insect net	13 May 2017	DH	MPN	CW3517
SC (South Canterbury)	1♂, 1♀	Fox Peak	43.84°S, 170.79°E	2,000			22 Feb. 2015	SAT	MPN GenBank	CW2811, CW2812 PP155082, PP155083