

NOTES ON THE DISTRIBUTION OF NEW ZEALAND CICADAS

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During the past three summers the writer and others have been assembling data on the distribution and ecology of New Zealand cicadas. The present notes record notable changes from the last published review (Hudson's **Fragments of New Zealand Entomology**, 1950) and draw attention to outstanding questions that collectors may help to solve. Discussion of systematic problems is avoided. For references see Hudson (1950) and papers cited therein. Grateful acknowledgment is made to the many who have supplied specimens. Messrs. T. Grant-Taylor and J. S. Dugdale have kindly permitted their records to be used.

Melampsalta cingulata (F.): A gap in the South Island distribution, east of the divide in Canterbury, apart from Banks Peninsula (? also N. and central Otago) needs defining. Three Kings, but no Stewart Island records.

M. strepitans (Kirkaldy): North Island, coast from Oteranga B. (new) to Ohiro B. and between Wainuiomata and Orongorongo R. mouths (but apparently not further east). South Island: D'Urville Island and Miner R., Nelson (new record) east throughout Marlborough and south in Canterbury, but limits undefined south of L. Forsyth and Waimakiriri R.

M. scutellaris Walker: First South Island records from Picton.

M. sericea Walker: Three Kings (Auckland Museum, new record) and North Island, ranging south to Wanganui and Manga-weka on west and to Palliser B. (new record) on east, regular at Kaitoke, but no records in Wellington, and old Paekakariki records not yet re-confirmed. Apparent gap in central volcanic area south of the Hinemaiaia needs definition.

M. cruentata (F.): Throughout North and South Islands (? rare in Northland). No E. Otago records.

M. ochrina (Walker): Three Kings (Auckland Mus., new record), North Island throughout, but absent from mountains in south.

M. muta (F.) and relatives formerly considered varieties: Systematic position too confused to summarise.

M. leptomera Myers: North Island west coast dunes from Wellington to far Northland (many new records north of New Plymouth) and eastern Northland near Warkworth and Whangaparoa Peninsula (new), but no records yet from rest of east coast south to Wellington (absent in Hawke's Bay).

M. cassiope (Hudson): North Island, in National Park and Moawhango headwaters (new record). South Island, subalpine scrub from Dun Mt. and Cobb south to Mt. Cook; no records further south yet confirmed.

M. mangu White: South Island screes from L. Sylvester and Dun Mt. south, perhaps entirely east of main divide south of Lewis Pass, but southern and western limits not well defined.

M. oromelaena Myers: Fiordland north to Island Pass and Wairau-Rainbow divide, including main divide, but more records needed to define eastern limits (? Mt. Ida).

M. nigra Myers: Gertrude Saddle and Remarkables north on main divide to Island Pass, but more records needed, especially to define eastern limits in Otago (? Obelisk).

M. hamiltoni Myers: Known localities (riverbed) are Bealey R., Maruia Springs, Otira, Ashley Gorge, Cave Creek, Algidus, White Rock, Mt. Thomas (N. Canterbury), L. Rotoroa, Travers Valley, and more records are needed to define distribution in Westland (? Waihao Gorge) and Otago. Akatarawa, Pohangina and Ruamahanga rivers (new); North Island race.

M. campbelli Myers (= **maorica** Myers): New North Island records: Ketetahi, Mangatepopo, Moawhango headwaters; Karori, Wellington (single specimen, Dom. Mus.). Other Dom. Mus. specimens so labelled from Tarawera, Waimangu and Mt. Maunganui are **M. sericea** Walker. South Island: Nelson (? now extinct, E. S. Gourlay, 1934) and French Pass, south to Monowai, mainly montane riverbeds but also rock and bare soil above bushline in central North Island.

M. iolanthe (Hudson): Waiomo (Thames), Rotorua district, Urewera (all new records), south to Wellington.

M. lindsayi (Myers): Mt. Noble, Hurunui R. (P. M. Johns, new record), Whiterock, Mt. Grey, Glentui—thus very restricted on present records.

The writer would welcome the opportunity of examining specimens that appear to extend the distribution areas roughly defined above.