

ART. VIII.—*A Description of a new Species of Coccinella found in New Zealand.*

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[Read before the Hawke's Bay Philosophical Institute, 11th July, 1887.]

CLASS INSECTA.

ORDER IV. COLEOPTERA.

Tribe CLAVIPALPI.

Section TRIMERA.

Group **Coccinellidæ**, Latreille.

Genus **Coccinella**, Linn.

C. novæ-zealandiæ, sp. nov.

Sub-hemispherical, moderately gibbous, $2\frac{1}{2}$ lines long. *Body*, head, and legs black; *elytra* light vermillion, spotted with black. *Head* (and *prothorax*) intensely black, glossy, sub-iridescent, with two deltoid-shaped white spots between the eyes, and two minute ones below eyes at their inner angles; *maxillary palpi* terminal joint very large, broad, and flat; *labrum* with a few fine short ciliæ-like hairs; *antennæ* tips broadly cuneate, flattish. *Prothorax* with a large pentangular (escutcheon-shape) white spot on each anterior angle of pronotum. *Elytra*, margins considerably dilated and of a brighter red, with 11 sub-orbicular spots, disposed regularly in two rows longitudinally and three rows laterally, the upper spot on sutures near base over scutellum being the largest, with a white patch at base above; the four central large and the six outer small; their edges very irregular and ragged; a circular light-red spot in the middle of each elytron, margin entire; and two obscure longitudinal veins; the whole finely powdered with excessively minute black specks, which are more thick near the sutures. *Hind-wings* rather large, dusky, mostly so about costal and sub-costal veins, with an opaque dull-reddish line on costal edge from base to near second costal cell, where it forms a squarish-oblong blotch, or kind of ptero-stigma; the sub-median vein strong and clearly marked. *Meta-sternum* white. *Abdomen* very finely and minutely hairy, with a white spot beneath at each anterior angle; tip of anal portion hairy; hairs patent. *Legs*, tarsi finely and closely hairy.

Hab. Napier; forests interior of Forty-mile Bush, Waipawa County, 1870–85; (also earlier at the north, Bay of Islands, etc.); but always singly and very rarely met with. Mr. Hamilton has lately (1886) captured a single specimen.

Obs. Although I have long known this pretty little insect, I have never before thought of describing it: partly from the great number of species of this genus already known, which (without their equally numerous varieties), it is said, amount to upwards of a thousand*; partly from it so closely resembling (in its general appearance) some of our British species; and partly from its extreme rarity. I do not think I have seen, altogether, a dozen specimens in 50 years!—in this respect so widely different to what obtains of some of their commoner (yet similar) species in England. Indeed, I may truly say that the capture or sight of one of these interesting little and rare creatures—so very like the tiny “Ladybirds” of England in size, shape, colour, and spots—always served to conjure up pleasant old reminiscences of childhood, and of the old childish couplet, potently repeated in days of infancy over the pretty “Ladybirds” when caught, and watching them taking flight from one’s hand:—

“Ladybird, Ladybird, fly away home;
Your house is on fire, your children are gone!”

The under-wings of this species seem to me to be much larger than those of the British species of a similar size of body; and I think this species is therefore a better flyer, more active and vigilant, and consequently more rarely at rest and difficult of capture: if, as I have supposed, its wings be larger, it may keep at a higher range on trees and shrubs in search for its natural food.

I have kept one a fortnight under glass, during which time it was in ceaseless activity, and as I did not procure for it its natural or suitable food, it fasted the whole of that period, and was as lively at the close (when I put it into spirits) as at the beginning. While in captivity, I noticed a peculiarity it had: on being irritated, or alarmed, it would exude many minute drops or specks of a yellowish, sticky, semi-fluid substance on to the sides of the glass in which I kept it. I now find that this peculiarity had also been long ago observed in the Northern Hemisphere species. Westwood says: “When alarmed, they fold up their legs and emit a mucilaginous yellow fluid from the joints of the limbs, having a very powerful and disagreeable scent, and which, according to some writers, is an admirable specific against tooth-ache” (*loc. cit.*). I did not, however, notice the powerful odour mentioned by Westwood.

Although this genus is an old established and very large one, many of its species being almost cosmopolite, and the

* “The species are difficult to discriminate, and number upwards of a thousand.” (“Guide to the Study of Insects,” Packard, p. 511.) “These insects are among the most variable and difficult, as to their specific discrimination, of all the Coleoptera.” (“Introduction to the Classification of Insects,” Westwood, vol. i., p. 396.)

numbers of some of them innumerable, the genus is but poorly represented in New Zealand. Down to the present time only one species, *C. tasmanii*, White, has been published as belonging to this Colony, and that species was detected at least forty-five years ago;* and, judging from its specific name, I should infer that it is not endemic but is also Tasmanian, where (at Hobart Town) those ships also stayed a long time during the preceding winter. I have also detected *C. tasmanii* here in Napier, upon the leaves of the "Ngaio" tree (*Myoporum laetum*); but, like the others, only very rarely; it is a smaller insect, a little more gibbous, and black with yellow spots. In so saying I should also observe that this species, which I believe to be *C. tasmanii* from its pretty closely agreeing with the description of it given by White (and recently copied by Captain Broun in his "Manual of N.Z. Coleoptera"), differs in at least one character, *i.e.*, the two spots between its eyes are *white* and not "yellow."

Moreover, I am aware of another species (*C. concinna*) said to have been found in New Zealand, the name only being given by Captain Broun ("Manual of Coleoptera," p. 645,) on the authority of Mr. Pascoe ("Ann. Mag. Nat. Hist.," Sept., 1875); of which species Captain Broun also says: "I know nothing of the insect by literature or otherwise." This may, however, prove to be identical with this newly described one of mine.

In conclusion, Captain Broun having mentioned Mr. Pascoe's name, I may also add a few words respecting him—one of our early scientific naturalist visitors. I knew Mr. Pascoe well, both as schoolboys together and denizens of the same native town, and, also, in later years, when he was here in New Zealand as surgeon of one of H.M. ships, before the formation of the colony. At that early time Mr. Pascoe made valuable collections in New Zealand natural history, especially of birds and insects. From him I received my first complete (MSS.) list of the avifauna of New Zealand, kindly compiled by himself for me. He particularly excelled in the skinning and preparing the smaller birds, an art he had early acquired at Home. The bare mention of this—our indigenous birds—leads me on further to observe, How very different our native woods and forests are now with respect to their former inhabitants, once so very numerous! now so very scarce, and of some kinds all but extinct!

* "Zoology: Voyage 'Erebus' and 'Terror,' Antarctic Expedition." As those ships only wintered here in our waters in 1841, and as this genus is mainly to be met with in the summer; and as I had given to the Expedition a large collection of insects (in spirits), it is not unlikely that that species was among them.