

hoping for further notes from the observer, and for specimens for investigation.

Another point which seems of interest is the observation of Prof. Wallace of the *Charæas* larvæ being found in immense numbers on the land on which the Voles did so much damage a few years ago.

The coincidences may very likely be of no scientific or practical interest beyond showing partiality of both the Vole and insect pests for the same kind of upland locality, and the same kind of vegetable food, so far as grass is concerned, but the occurrence may be just worth mention.

Agriculturally, these sweeping attacks of *Charæas graminis* are of a good deal of importance, as their ravages (bad enough in destroying the pasturage) may extend to such corn land as there may be in the mountainous or upland districts preferred by the infestation, but such measures of treatment as may lessen the evil, as well as descriptions of the imago, and details of the wide European distribution of the species have been given so fully by many entomological writers, that it is unnecessary to enter on them again here.

Torrington House, St. Albans :

July 10th, 1894.

ON A NEW SPECIES OF *PSYLLA*.

BY W. M. MASKELL.

Genus *Psylla*, Löw.—Head with arched ridges ; vertex with two posterior shallow perforations. Dorsulum well developed, about as broad in front as behind. Elytra more or less widely rounded, usually broadest near the middle ; the apex is between the subcostal and the cubital veins ; the stalk of the cubitus is shorter than the stalk of the subcosta. Frontal cones divided from the vertex.

PSYLLA ACACIÆ, *sp. n.*

♀. Length of adult female about $\frac{1}{13}$ inch. General colour of the thorax, dorsally, dark brown with very faint, small, narrow, yellowish stripes. Head buff, with brown stripes ; frontal cones black ; eyes yellowish ; anterior ocelli dark orange. Abdomen greenish, with bands of dark brown ; genitalia orange. Antennæ and feet light brown, darkening to the tips. Vertex rather flat, covered with a short light coloured pubescence. Eyes prominent, semiglobular. Dorsulum moderately elevated. Frontal cones rather short. Antennæ with the first two joints thick and short, the rest long and slender ; the whole antenna is nearly as long as the body. In the fore-wing the costa or marginal vein is stout, and runs all round the margin till it meets the clavus. The primary stalk is nearly one-fourth the length of the whole wing ; at its extremity the stalk of the cubitus is half as long as the stalk of

the sub-costa; the radius or main branch of the subcosta is very slightly convex, and reaches the margin above the apex; the secondary subcosta is also very slightly convex, and throws off a very short reflex branch to the margin soon after its furcation, thus forming a long, narrow and obscurely punctate pterostigma; the main cubitus is convex, reaching the margin as far below the apex as the radius does above it, and forks at half its length, throwing off a branch reaching the margin at a distance equal to that between the main branch and the radius; the secondary cubitus forks at half its length, but the upper branch is very convex, and therefore nearly twice as long as the lower; the clavus is very slightly concave. The veins just described form closed cells on the wing, in all of which, with the exception of the anterior basal cell, the stigma and the claval cell, there are a number of disconnected patches formed of minute punctuation and shading; four of these are Y-shaped, with stalks starting inwards from the margin, the rest are irregular; these patches cover rather more than the outer half of the wing. The genitalia consist of two conical valves or plates, broad at the base, with slightly convex sides and sharp points; between them the ovipositor slightly protrudes; these valves are very short, being scarcely longer than the penultimate abdominal segment. Both valves bear many short fine hairs.

♂. The adult male resembles the female in size and colour, and in the venation of the wings. The genitalia consist of the usual processes placed dorsally at the extremity of the abdomen. Viewed sideways the genital plate is anteriorly cylindrical, and very broadly rounded posteriorly; the forceps consists of two rather narrow, somewhat pyriform processes with the tips turned backwards; the penis is subcylindrical. Viewed from above the rounded posterior portion of the genital plate is seen to consist of two lateral lobes, and the two processes of the forceps curve inwards. The segment which bears these organs is about as long as, or a little longer than, the two penultimates together. All the processes bear some short spiny hairs.

Pupa naked, active; average length about $\frac{1}{25}$ inch. General colour buff, with dark brown patches on the thorax and transverse narrow brown stripes on the anterior abdominal region, the posterior region brown. Antennæ long, slender, brown, darkening to the tips. The posterior abdominal extremity is truncate and not produced, and bears a few longish hairs. The anal ring is elongated, and as if formed of two oblique, convex, conical divisions, with their bases conjoined and their divergent tips pointed; in consequence the posterior margin is straight, the anterior deeply concave.

Larva generally similar to the pupa, but smaller; the average length is about $\frac{1}{40}$ inch.

Habitat: in New Zealand, on *Acacia melanoxylon* at Wellington. A tree of this species in a garden is every summer covered with great numbers of the insects in all stages of growth. In winter an occasional stray adult may sometimes be found, but rarely. The tree, which is about 20 feet high, does not seem to have been as yet seriously damaged, though it is not as vigorous as it should be; it is, however, also attacked by *Aspidiotus camelliæ*, Boisduval, and the Coccid will probably be more injurious to it than the Psyllid.

The plant is Australian and Tasmanian ; doubtless, therefore, the insect may have also come from thence. I have not seen a specimen on any other tree in the same garden or elsewhere.

The venation of the wings and other characters fix this species in the genus *Psylla*. But after close study of all the species mentioned by Löw, Scott and Riley, and comparison with more than twenty species in my own collection, I cannot find any which exhibit the same markings in the cells of the fore-wing. *Psylla rhois*, Löw, *P. limbata*, Meyer-Dür, *Pachypsylla venusta*, Riley, come near it, but differ quite sufficiently in many particulars. Nor does it seem to be any of the species reported by Dobson (Proc. Roy. Soc. Tasmania, 1850).

Wellington, New Zealand.

PALPARES WALKERI, A REMARKABLE NEW SPECIES OF
MYRMELEONIDÆ FROM ADEN.

BY ROBERT McLACHLAN, F.R.S., &c.

On the voyage home from his late extended period of foreign service, Mr. J. J. Walker, R.N., F.L.S., had the opportunity of part of a day's (June 18th, 1893) collecting at Aden, and with his unvarying skill contrived to turn such an unpromising locality to good account. Amongst his captures were two males of a highly remarkable Ant-Lion, which I describe as under:—

PALPARES WALKERI, *n. sp.*

Head above yellowish-white, with indications of a dusky median spot posteriorly (but without distinct band) ; much swollen, and with a deep median longitudinal sulcus ; a narrow transverse black band (in which the antennæ are placed) connects the eyes ; face whitish-yellow, tips of mandibles dark piceous. Palpi dark piceous, the labial very long. Antennæ longer than the mesothorax, black, gradually clavate, the apex very acute. Thorax above whitish-yellow, with three black longitudinal bands, viz., one median, and one on either side (on the mesonotum these bands become confused and divided, and are still more vague on the metanotum) ; pronotum transverse, the fore and hind margins much raised, the former with a fringe of cinereous hairs directed forward, the latter with long erect blackish hairs and a fringe of cinereous directed backwards, between the raised fore and hind margins is a transverse elevated ridge : meso- and metanota clothed with cinereous hairs slightly mixed with blackish : sides of thorax, and beneath, blackish, with a short clothing of cinereous hairs. Legs black, and somewhat shining, with short cinereous and longer blackish hairs ; tibial spurs and tarsal claws dark reddish-piceous. Abdomen comparatively short, stout, piceous or flavescent above to end of 4th segment, then passing into blackish and blackish beneath (in one example, probably more mature, the abdomen is wholly black) ; there is a short, sparse, cinereous clothing, longer at the base : the posterior margin of the last dorsal segment

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“The conceptions of great and small exist in our minds only, and in relation to ourselves, and for this reason the structures of almost imperceptible insects are in reality just as admirable as those of animated masses of colossal size.”—*Osten Sacken*.



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