ENTOMOLOGIST

An Illustrated Journal

OF

GENERAL ENTOMOLOGY.

EDITED BY RICHARD SOUTH, F.E.S.

WITH THE ASSISTANCE OF

ROBERT ADKIN, F.E.S. H. ROWLAND-BROWN, M.A., F.E.S. W. LUCAS DISTANT, F.E.S., &c. F. W. FROHAWK, F.E.S., M.B.O.U. C. J. GAHAN, D.Sc., M.A., F.E.S. W. J. LUCAS, B.A., F.E.S. CLAUDE MORLEY, F.E.S., F.Z.S. DR. D. SHARP, F.R.S., F.E.S., &c.

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JANUARY, 1919.

No. 668

"THE HETEROPTERA OF INDO-CHINA."

BY W. L. DISTANT.

Fam. Pyrrhocoride.

LIST OF SPECIES ALREADY RECEIVED.

Lohita grandis, Gray.
Physopelta gutta, Burm.
Physopelta schlanbuschi, Fabr.
Antilochus coqueberti, Fabr.
Antilochus russus, Stål.
Ectatops indignus, Walk.
Euscopus rufipes, Stål.
Euscopus indecorus, Walk.

Melamphaus rubrocinctus, Stål. Raxa collaris, gen. n., sp. n. Odontopus binotatus, Stål. Odontopus nigricornis, Stål. Dindymus rubriginosus, Fabr. Dindymus lanius, Stål. Dysdercus evanescens, Dist.

Exact localities will be given in a subsequent complete work.

Raxa, gen. nov.

Body oblong, elongate; head with eyes about equal to or very slightly wider than anterior margin of pronotum and in length about equal to breadth at base including eyes; rostrum robust, first joint about or almost reaching anterior coxæ; antennæ long, somewhat slender; pronotum with a broad, convex, anterior collar, the anterior margins of which project slightly beyond the lateral angles of the anterior lobe, which is only about half the length of the posterior lobe, the lateral margins moderately laminate; the basal angles broadly subrotundate; scutellum about as long as broad, its base broadly depressed, its apex acute; corium with the lateral margin a little convex, membrane passing the abdominal apex; femora moderately robust; tibiæ almost as long as femora, anterior femora with a prominent spine near apex; basal joint of the posterior tarsi longer than the other two joints together.

Allied to Melamphaus, from which it can be at once differentiated by the broad, convex, anterior collar.

Raxa collaris, sp. n.

Head testaceous; pronotum and corium ochraceous; anterior pronotal collar, lateral and posterior margins sometimes testaceous; central area of pronotum narrowing anteriorly; scutellum, clavus, a large central spot to corium, and membrane, excluding apex, black;

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body beneath testaceous; sternum with black suffusions, and the abdominal segmental incisures also black; legs black, beneath longitudinally ochraceous; antennæ black, basal joint testaceous; rostrum black, the basal joint beneath sometimes testaceous; antennæ with the first and second joints longest and subequal in length, third shortest; pronotum with the basal area sparingly coarsely punctate, and the margin between the anterior and posterior lobes also more closely coarsely punctate; basal area of scutellum and corium including clavus coarsely punctate; rostrum reaching the intermediate coxæ, first joint about or almost reaching the anterior coxæ; anterior femora beneath with a strong subapical spine.

Long, 19–23 mm.

Habītat.—Tonkin and Xieng Khouang, Ban Sai (R. Vitalis de Salvaza).

RHOPALOCERA OF THE UPPER LYS VALLEY, NORTHERN FRANCE.

BY CAPT. E. H. MANN, M.C., AND CAPT. EVELEIGH, R.F.A.

The following results obtained by two very amateur entomologists during the past few months may possibly prove of interest. The list of captures must, I fear, seem very meagre; but to a certain extent this can be explained by the fact that the weather was not of the best—a very large number of days being very windy—and also to the fact that the best collecting hours usually found both of us employed on our military duties, with the result that expeditions were spasmodic, and, as a rule, late in the afternoon.

No specimens of *Papilio machaon* were observed until August, although several areas of reedy, marshy country were watched. During the first week of August two were taken, followed by several more the succeeding week. Wheat and clover fields situated on high ground seemed the favourite settling-place, though two were observed settling on the warm stones of a railway-track. *Iphiclides podalirius* was not seen, nor has it ever been seen by M. de Wailly, a local entomologist.

I would like to say here that comparison with M. de Wailly's cabinet, the result of forty years' collection, proved interesting and instructive, and the information obtained from him as to the likely places for different species assisted us to a very large

extent.

Pieris brassicæ and P. rapæ appeared in their usual numbers. Euchloë cardamines were plentiful up to the end of June, but their disappearance was practically instantaneous. Leptosia sinapis was not observed, and as only one specimen figures in M. de Wailly's cabinet it is presumably infrequent in this locality.

One specimen of *Colias hyale* was taken early in June after a long chase. During August they were observed in large

numbers, and could easily be taken when settled on clover or lucerne fields, though a long run was always experienced if the insect had been alarmed.

The appearance of Gonepteryx rhamni was normal, several

good specimens being taken.

Brenthis euphrosyne were taken on the borders of woods, but were not at all frequent.

One specimen of *Issoria lathonia* was observed, but effected its escape, as no net was to hand. M. de Wailly has one good

specimen of this species, but states that it is uncommon.

A large colony of *Dryas paphia* established itself in a glade in a wood. Ab. *valesina* appeared in this colony with some frequency. The ground-colour of some of these specimens was of a very much greener lustre than the normal, so much, in fact, that a sub-variation of *valesina* was suspected. Any further information concerning this suspicion would be much appreciated.

Argynuis cydippe and A. aglaia were not observed at all—an absence which would seem rather remarkable in a locality so

well suited to these species.

The Vanessa group were plentiful, all species being taken with the exception of Euranessa antiopa, of which M. de Wailly has

only seen two specimens in forty years.

Eugonia polychloros was very much more plentiful than in the British Isles, being observed in comparative frequency. Its favourite settling-place appeared to be the barks of the darker-coloured trees, its sombre underside rendering it very inconspicuous when settled.

Aglais urtica were present in their usual hordes. M. de Wailly has a very interesting specimen of ab. ichnusoides in his

cabinet, taken some years ago.

Pyrameis atalanta were scarce during the earlier months, but became very much more common during the second half of September.

Limenitis sibylla was observed and taken. Several specimens of abnormal size are reported in a large wood some miles distant.

Two specimens of Apatura iris were observed, and one was taken. This pleasing capture was effected on a very windy day, the insect being driven down from the tree-tops and settling on some lower branches.

Epinephele jurtina and Canonympha pamphilus were of great

frequency.

Pararge egeria and P. megæra were taken, the latter species being present in numbers that almost rivalled the commoner species of Pieris. The specimens had, however, to be carefully selected, as the fighting tendencies of this species caused the vast majority to be badly damaged.

Thecla w-album and Zephyrus quercus were the only two

representatives of the *Thecla* group to be taken. The lack of a long-handled net was badly felt when dealing with this genus, although the w-album were present in abnormal quantity and at low elevations.

Chrysophanus phleas were in plenty, being found most

plentifully in standing wheat and oat-fields.

Polyommatus icarus, Celastrina argiolus and Cupido minimus represented the Lycæna group, the first in great numbers, but the last two named were uncommon, only one specimen of each being obtained.

Hesperia malvæ, Adopæa flava (thaumas) and Augiades sylvanus represented that interesting family the Hesperiidæ,

being frequent in all lucerne. clover and wheat-fields.

It is hardly to be doubted that more experienced entomologists, with more time at their disposal than we had, would have succeeded in deriving considerable information as to the differences of habit and frequency of Continental Rhopalocera of Northern France from our own. Any information that we can give will be gladly put at the disposal of any inquirers.

1st Army Artillery School, B.E.F.

ORTHOPTERA, ODONATA AND NEUROPTERA FROM SALONICA.

By W. J. Lucas, B.A., F.E.S.

In vol. xlix (1916) of the 'Entomologist,' p. 248, I placed on record a few Neuroptera and Odonata sent me by Mr. P. J. Barraud, F.E.S., from the Salonica front. I have since received three other small consignments made by the same entomologist in the same interesting district. They are as follows:

ORTHOPTERA.

Labidura riparia, Pall.—One male of the large earwig, which, though now British, is, it is to be feared, disappearing from its one known locality on the Hampshire coast. The insect sent was taken at Salt Lake, near Naresh, Salonica-Janes Road, on August 4th, 1918. It is a dark example, but the colour may be partly due to drying, though one would think it could never have had the dirty-white tint of British examples.

Forficula auricularia, Linn., var. conspicua.—One teneral male (1917, but otherwise undated), apparently having but recently become an imago. One male, May 8th, 1917, and one female, May 14th, 1917, from Saracli, fairly common at an elevation of 1000 ft. They were also found in winter at Basanli hibernating in a rotten cherry-log. Four males and two females from Paprat, common at an elevation of 2200 ft., in May and June, 1918. These ear-

wigs are in general dark insects, even the callipers being fairly so; the legs, however, are pale russet. The lateral margins of the pronotum are pale, the elytra and wing-tips are large, and the latter are nearly white with a dark margin. This gives the insect a distinctive and conspicuous appearance, and suggests the varietal name conspicua, which I have given it. This white spot is often indicated in British examples, but in the present specimens it is very strongly developed. All the males sent have "high" callipers, the longest measuring 9 mm. from the tip to the outer shoulder at the base. Whether "low" males were present I cannot say.

*Empusa fasciata, Brullé.—One male imago, Saracli, June 4th,

1917.

Gryllotalpa gryllotalpa, Linn.—One female imago, Kopriva, Struma Valley. It was common at low elevations in April, May and June, 1918.

ODONATA (= PARANEUROPTERA).

Sympetrum striolatum, Charp.—One female, Saracli, 2000 ft., very common, June 6th, 1917. One somewhat teneral female, Paprat, June 12th, 1918.

S. vulgatum, Linn.—Two females, somewhat teneral, near

Paprat, June 15th, 1918.

Orthetrum carulescens, Fabr.—Nine males and one female, near Paprat, June 15th, 1918. The female is very teneral; of the males five are mature and powdered with blue; the other three have no blue colouring and are more or less teneral. In connection with some of these insects, Mr. Barraud remarks: "They take up rather a curious position at rest when watching for prey—usually on the highest point of a dead flower-stem or stick. The wings are held downwards and forwards, while the insect always faces away from the sun. By moving slowly I was on one occasion able to approach my face to within about one foot of the insect and could watch every movement. I judged that it was able to see fast-moving objects at a distance of 3 ft., as, when flies went by at about that distance, the dragonfly moved its head from side to side as if watching them. It appeared also to exercise some choice as to the kind of fly preyed upon. No notice was taken of some kinds, but a quick dash was made after others. What these were I was unable to determine, the movements being so rapid. The insect returned again and again to the same post of vantage after an excursion." Mr. Barraud may have intended this note to refer to S. striolatum, for he apparently took both for the same species. †

*Onychogomphus uncatus. Charp.—One male, near Paprat, at

an altitude of 2000 ft., June 15th, 1918.

^{*} The species marked with a star are not British. † S. striolatum has similar habits in England.

Cordulegaster annulatus, Latr.—One female, from Paprat, Krusha, Balkan Hills, about 2500 ft., May 29th, 1918.

Calopteryx splendens, Har., var. xantho-toma, Charp.—A male, June 10th, 1918, and a female, June 12th, 1918, Paprat, 2000 ft.

*Lestes barbara, Fabr.—One female, near Paprat, 2000 ft.,

June 13th, 1918.

Pyrrhosoma nymphula, Sulz.—One male, Paprat, June 6th, 1918.

Ischnura pumilio, Charp.—A male and a female, Paprat,

Krusha, Balkan Hills, about 2500 ft., June 6th, 1918.

Platycnemis pennipes, Pall.—Eight—four males, Paprat, June 6th, 1918; one male, Paprat, Krusha, Balkan Hills 2300 ft., June 10th, 1918; one male and two females, Paprat, June 12th, 1918. Some of those taken on June 6th are not quite mature, one female being in fact very teneral. Although some are discoloured, they appear to belong chiefly to the whitish form.

*Agrion ornatum, Heyer.—One male, Paprat, June 12th, 1918.

NEUROPTERA.

*Formicaleo tetragrammicus, Fabr.—An ant-lion, one, Saracli, June 4th. 1917.

*Myrmecælurus trigrammus, Pall.—An ant-lion, one, Paprat,

July 1st, 1918.

*Palpares libelinloides, Linn.—A male and a female of this fine ant-lion, Salt Lake. near Naresh, Salonica-Janes Road, August 4th, 1918.

*Nemoptera sinuata, Oliv.—Two, Saraeli, 2000 ft., common,

June 6th, 1917.

Osmylus chrysops, Linn.—Two, Paprat, 2200 ft., July 1st, 1918.

Kingston-on Thames, December, 1918.

HEMIPTERA-HOMOPTERA TAKEN IN THE NEW FOREST.

By G. T. LYLE, F.E.S.

Local records of Hemiptera being so few, I have been urged to publish the following list, in spite of its very incomplete character. The species mentioned have been met with during the past nine years, mostly while collecting insects of other orders, and the number recorded could probably be doubled in a single season by serious work. I am greatly indebted to Mr. James Edwards and Mr. E. A. Butler, B.A., B.Sc., for most kindly and willingly naming those specimens of which I was uncertain.

Cicadetta, Am.

Montana, Scop. Very local. I have nothing to add to my notes already published in the 'Entomologist' (xliii, p. 1, xliv, p. 332, and xlvi, p. 301), excepting that Mr. Charles Gulliver tells me that in 1916 he discovered a second breeding-place of the species, some two miles distant from that described by me.

Centrotus, Fab.

Cornutus, Linn. Fairly common in May; the nymph may be beaten in September from various trees.

Issus, Fab.

Coleoptratus, Geoffr. More plentiful in the old woods than in the more recent enclosures, June to September. The insect usually assumes the perfect state in the early part of the former month.

Cixius, Latr.

Pilosus, Ol. Very common in May. Var. infumatus occurs plentifully, and I have also several times taken var. albicinctus.

Nervosus, Linn. Common, though not so plentiful as the last (August and September).

Brachycranus, Fieb. Taken occasionally in late autumn.

Liburnia, Stal.

Pelucida, Fab. Common.

Fairmairei, Perris. One on September 18th, 1910.

Strioma, Fieb.

Pteridis, Boh. Very abundant.

Triecphora, Am. et Serv.

Vulnerata, Illeg. Somewhat scarce and local; a few specimens may usually be beaten in May from hawthorn bushes in Stubby Copse. I am told that the species was formerly much more plentiful.

Aphrophora, Germ.

Alui, Fall Abundant on various trees and shrubs, particularly Myrica gale.

Salicis, De G. Common, though far less so than the last.

Philænus, Stal.

Spumarius, Linn. This very abundant insect does not appear to vary so much as in other districts. On August 31st, 1910, I swept a very pretty form from blossoming ling. In this specimen the head and prothorax are pink, the elytra being of the same colour with two black blotches on the costa. Mr. E. A. Butler, who has seen the insect, tells me the form is new to him.

Lineatus, Linn. Very plentiful in the bogs.

Ledra, Fab.

Aurita, Linn. Usually, though not always, on oak; the imago is fairly common in July, August and September, while the nymph I have found in every month from April to October, with the exception of July. The nymphs are quite small at the end of August, but attain a length of 8 mm. or so before going into hibernation.

Ulopa, Fall.

Reticulata, Fab. Very abundant.

Macropsis, Lewis.

Lanio, Linn. Common on oak in September and October.

Bythoscopus, Germ.

Rufusculus, Fieb. Usually plentiful on birch; was particularly common in September, 1910.

Flavicollis, Linn. Very common on birch in May.

Pediopsis, Burm.

Rubi. One on August 24th, 1910; the specimen was identified by Mr. E. A. Butler.

Idiocerus, Lewis.

Lituratus, Fall. Common on sallows in September and October.

Tibialis, Fieb. I took an example of this rare species from honeysuckle on March 23rd. 1913.

Confusus, Flor. Very common on sallow August to November.

Evacanthus, Lep. et Sev.

Interruptus, Linn. Appears to be somewhat scarce.

Acuminatus, Fab. More common than the last. I have swept several from bilberry growing under trees in August.

Tettigonia, Geoff.

Veridis, Linn. Not common.

Eupelix, Germ.

Cuspidata, Fab. Occasionally swept from low plants in Stubby Copse, May.

Athysanus, Burm.

Grisescens, Lett. Swept from rough grass, heather, etc., in May.

Obsoletus, Kbm. Common in the bogs.

Subjugendus, Kb. In great numbers on grass (Spartina stricta), growing on muddy shore of Solent at Park and also near the mouth of the Beaulieu river. First taken in Britain

by Mr. Butler, who discovered it on the opposite shore of the Solent and also found it plentifully at Lymington (E.M.M. xlviii, p. 13). In 1898 very little of the grass was growing on the Solent mud flats, a few isolated clumps only shewing, but now the whole of the flats have the appearance of verdant fields. Longshoremen have told me that the plant was introduced during the hard winter of 1895, when roots were transported from Southampton water frozen in ice floes which grounded on the flats. I was myself a witness to its marvellously rapid spread.

Deltocephalus, Burm.

Socialis, Flar. Very plentiful on heather.

Allygus, Fieb.

Mixtus, Fab. Abundant on oak and occasionally taken on birch, July to October.

Thamnotettix, Lett.

Dilutior, Kbm. On oak; also swept from bracken.

Subfuscula, Fall. Fairly plentiful on oak in May. On blossom

of wood spurge, April 24th, 1912.

Cruentata, Panz. Common in the bogs and in damp places on heaths. I have very many times swept it from heather and beaten it from young birch trees.

Spiendidula, Fab. Common.

Limnotettix, Sahl.

Striola, Fall. Usually to be found in damp places on heaths.

Cicadula, Fieb.

Septemnotata, Fall. Plentiful amongst herbage in ditches. Fascifrons, Stal. Mr. Butler so named a female which I took on broom, September 18th, 1910.

Sexnotata, Fall. Very common.

Alebra, Fieb.

Albostriella, Fall. This handsome and variable insect is common on oak and beech.

Dicraneura, Hardy.

Mollicula, Boh. A few on hazel in a lane at Brockenhurst.

Kybos, Fieb.

Smaragdula, Fall. Common on sallow and birch.

Chlorita, Fieb.

Flavescens, Fab. Beaten from holly in November.
Viridula, Fall. Common; passes the winter in thick
conifers, holly or ivy.

Eupteryx, Curt.

Vittatus, Linn. Common on ranunculus in damp woods near streams.

Strachydearum, Hardy. Often swept from wood sage. Auratus, Liv. On low plants; once on garden parsnip.

Atropuuctata, Goeze. On low plants in damp places.

Germari, Lett. On Pinus sylvestris; also common on Douglas fir in the winter.

Pulchellus, Fall. Common, usually on oak, but occasionally on sallow.

Concinna, Germ. Also common on oak. I have noticed that this species is particularly liable to the attacks of a parasite (Gonotopus sp.?), the brownish, globular larvæ of which is firmly attached to the abdomen of its host. E. pulchellus and E. Germari are also preyed upon by the parasite. Unfortunately I have never succeeded in rearing it.

Typhlocyba, Germ.

Jacunda, H. S. On alder.

Sexpunctata, Fall. Common on sallow and occasionally on birch.

Ulmi, Linn. Very abundant in hedges near elm trees at Brockenhurst. In the forest itself elm does not grow.

Aurovittata, Dougl. Swarms on bramble in October.

Douglasi, Edw. Common. Gratiosa, Boh. One beaten from beech, October 30th, 1910. Quercus, Fab. Common on oak.

Geometrica, Schr. Fairly abundant on alder.

Carri, Ed. Mr. J. Edwards has so named a specimen I took on September 9th, 1910.

Zygina, Fieb.

Alneti, Dahl. Fairly common.

Flammigera, Geoff. Beaten from yew and Douglas fir in winter.

Tiliæ, Fall. I have two specimens named by Mr. Edwards, one from oak, August 31st, 1910, the other from Douglas fir, December 17th, 1910.

Parvula, Boh. From oak and holly in November.

Neglecta. Common on Douglas fir in winter. I have two which Mr. Edwards names var. rubrinerris.

Rose. Four, so named by Mr. Edwards with a "?," were beaten from conifers in the winter.

PSYLLINA.

Aphalara, Forst.

Caltha, Linn. Several beaten from Douglas fir in December and January.

Psyllopsis, F. Low.

Fraxini, Linn. Plentiful on ash in September.

Psylla, F. Low.

Pruni. Scop. I have a specimen taken on Douglas fir on

January 29th, 1911.

Cratægi, Schr. Not common. It would seem that this species usually passes the winter in furze-busines, and I have beaten it from Pinus sylvestris in February.

Rhamnicola, Scott. Fairly plentiful in conifers in winter.

Melanoneura, Forst. Countless numbers may be beaten from Douglas fir and other thick conifers in the winter. I have also taken it on oak in late August, hawthorn and sallow in early October, and found it very commonly on hawthorn and blossoming sallow in March.

Ferruginea, Edw. Common on Pinus sylvestris in January. Betulæ, Linn. On oak and birch in September and October. Nigrita, Zett. Mr. Edwards has detected one specimen

among a number of P. melanoneura beaten from sallow on March 3rd, 1912.

Peregrina, Forst. Several on hawthorn in August, September and October.

Mali, Schmdbg. On crab apple in October.

Forsteri, Flor. Plentiful on alder.

Arytæna, Scott.

Genistæ, Latr. Common on broom.

Trioza, Forst.

Albiventris, Forst. Plentiful on conifers in the winter, though not nearly so abundant as the next.

Remota, Forst. Exceedingly common on Douglas fir, etc. I have also beaten it from holly in November and December.

THE NOCTUIDÆ OF GREAT BRITAIN AS ARRANGED IN THE GENERAL COLLECTION AT THE NATURAL HISTORY MUSEUM.

By Richard South.

(Continued from Vol. LI, p. 272.)

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5147. Eublemma ostrina, Hübn.

Thalpochares ostrina, E.S.L., p. 10; T. iv, p. 8; M.B.I., ii, p. 55.

Eublemma ostrina, M., p. 168.