

THE
 ENTOMOLOGIST'S RECORD
 AND
 JOURNAL OF VARIATION
 EDITED BY
 J. W. TUTT, F.E.S.

ASSISTED BY

T. HUDSON BEARE, B.Sc., F.E.S., F.R.S.E.
 M. BURR, B.A., F.Z.S., F.L.S., F.E.S. T. A. CHAPMAN, M.D., F.Z.S., F.E.S.
 L. B. PROUT, F.E.S. H. ST. J. K. DONISTHORPE, F.Z.S. F.E.S.

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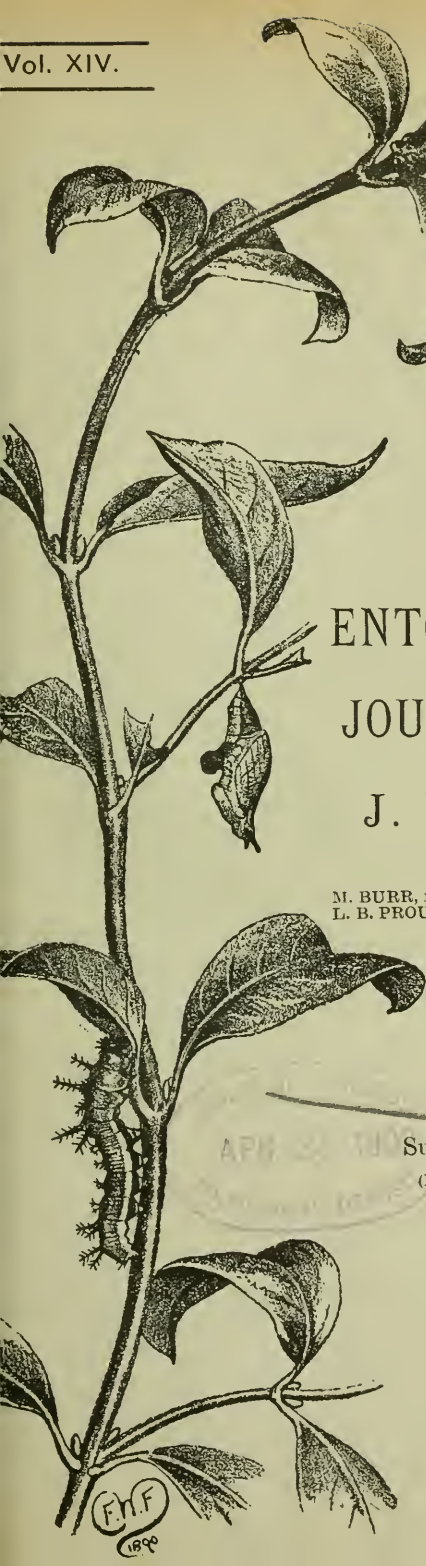
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 COLEOPTERA.

ON A BLUE ABERRATION OF *CALOSOMA INQUISITOR*, L., FROM THE NEW FOREST.—British specimens of *Calosoma inquisitor* are usually of a bronzy-red, with the lateral margins of elytra brassy-green; some specimens are of a darker red than others, and individuals not infrequently occur which may fairly be described as castaneous. Amongst a number of *C. inquisitor* taken by myself, near Brockenhurst, at Whitsuntide last year, however, I found a single specimen which differs completely in the coloration of the upper surface from our ordinary reddish forms, and Mr. R. W. Lloyd has kindly sent me, for examination, a specimen also from the New Forest, which, in colour, almost exactly resembles mine. These two specimens may be briefly described as follows:—Head and thorax dull aeneous, with the lateral margins of the latter in Mr. Lloyd's specimen, but only the basal angles in mine, blue; elytra blue, with an obscure aeneous tinge on each side of suture towards base, margins rich deep blue; sculpture of elytra as in ordinary form. Both specimens are ♀s, mine being much larger than Mr. Lloyd's. On the Continent, *C. inquisitor* is well known as a variable species in colour. Schaum, in Band I, of the *Insekten Deutschlands*, describes it as being of a "lighter and darker bronze-colour, with the margins of the thorax and elytra green, more rarely quite bronze-green, bluish, or blackish." Ganglbauer, in his fine work on the Central European *Carabidae* (1892), after describing the ordinary red form, adds "or wholly bronze-green, bronzy-brown, violet-blue, or black." Bedel (*Col. Faune du Bassin de la Seine*) records the blue form as occurring with the type in the Seine basin, but more rarely. It may be worth mentioning, that, in 1883, Signor Ragusa described*, in *Il Naturalista Siciliana*, a "var. *coeruleum*" of *C. inquisitor*, which is characterised as resembling *Carabus lefebvrei*† in colour, and as differing from the type, not only in colour, but also in its large size, and by the elytra being "not punctate-lineate, and by having, instead of the lines, strong points." He had only a single specimen of this form, but remarked that Herr E. Reitter had communicated a specimen almost identical with it from Croatia. I find that this var. *coeruleum*, Ragusa, is included in a paper by Jaroslau R. von Lomnicki, on the *Carabinae* of Galicia (published in the *Verhandlungen der K.-K. z.-b. Gesells. in Wien*, for 1893), as occurring in the forests of the Austrian province of Galicia, but "more rarely" than the type. I am not at all clear as to what Ragusa's structural distinction really means, as in addition to the longitudinal striae of the elytra in the type, there are the "pores," possibly he intends to indicate that the elytra in the aberration are smooth, and impunctate with the exception of the pores, but the matter is doubtful. Ganglbauer, I may add, does not allude to this "var. *coeruleum*" in his work.—F. B. JENNINGS, F.E.S., 152, Silver Street, Upper Edmonton, N. March, 1902.

COCCINELLA 11-PUNCTATA VAR. *CONFLUENS*, N. VAR.—In 1890, in the *Ent. Mo. Mag.*, p. 199, Dr. Mason records, amongst other Coleoptera from Iceland, a form of *Coccinella 11-punctata*, brightly coloured and

* This description was kindly procured for me by Mr. Donisthorpe, and I am indebted to Mr. Malcolm Burr, for a translation from the Italian.

† A species coloured like our *C. intricatus*.

with the lower pairs of spots on each elytron confluent. This reminded me of a specimen sent for me to see by Canon Cruttwell some time ago. He now writes to me "It was taken in considerable numbers on a patch of sandy coast near Renvyle, co. Galway, in August, 1899, and quite apart from any colony of the ordinary form, though that also occurred sparingly on other portions of the same coast. I am quite certain of this, for I searched carefully on two occasions expressly to satisfy myself that the common type was really absent from the locality." Dr. Mason also mentioned that none of the type form were found. Mr. Gorham tells me it is the var. G, of Mulsant, and he further says, "I think it is a fact that the *Coccinellidae* tend to vary both ways, 'par excès,' or 'par défaut,' at the extreme latitudes of their distribution."—HORACE DONISTHORPE.

CHANGE OF COLOUR DURING LIFE IN *COPTOCYCLA BISTRIPUNCTATA*, HERBST.—Last Christmas a foreign *Cassida* was brought to Mr. Heasler by a man who had found it on some apples purchased at Reading. He wrote to me about it as follows, "It is still alive and is normally a very brilliant golden colour, but after being stirred up, worried, etc., it turns to a metallic green, then the wing-cases go brownish with a sort of iridescent purple tinge in certain lights, and finally the whole insect becomes a reddish-brown or testaceous with black spots on the elytra." The insect died shortly afterwards and Mr. Heasler gave it to me. I took it to the Museum and found it was a specimen of *Coptocycla bistrispunctata*, Herbst. It is a native of Mexico, California, etc. Curiously enough amongst the specimens in the Museum is one brought to them by the Board of Trade, also found on an apple in England. I told Professor Poulton, who was much interested in the matter, about the changes in the colour during life, and he writes: "I feel sure the changes in the iridescence and from iridescent to brownish, are due to changes in the thinness of fluid layers between the chitinous lamellæ of the elytra." I do not think it is voluntary, but an indirect effect of contraction or expansion of the body, forcing a fluid, or abstracting it from the inter-lamellary spaces of the chitin."—IBID.

NOTES ON LIFE-HISTORIES, LARVÆ, &c.

LARVA OF *HYPERCHIRIA* 10 (1st instar).—Stout, plump, and Saturniid-like in appearance. Head large, shiny, bright orange in colour, with scattered thorny hairs. Body segments deeply cut, lateral flange suggested by coloration rather than actual development. Striking features are the tall fleshy horns on which the tubercular warts are mounted; they are nearly as long as the larva is thick. The dorsal and subdorsal tubercular warts on thoracic segments are bifid, the fork occurring about two-thirds up, whilst each fork bears a crown of spines. The abdominal ones are not forked, except the central one on the 8th abdominal, this is certainly formed of both the anterior trapezoidals; and the thoracic ones are almost as certainly composed of i and ii consolidated; the direction of the fork supports this view, as the thoracic forks are in a longitudinal direction, while those on the central line of the 8th abdominal are set transversely. On the abdominals i is mounted on a long stalk, while ii is represented by a simple single-haired button, the hair it bears is