

*Cryptophagus falcozi* Roubal (Col. Cryptophagidae) in Windsor Forest. — Some fungus-infected dead wood which I collected from an old beech trunk in Windsor Forest on 29.i.1981 contained a few beetles among which were five examples (1 male, 4 females) of a small unusually rounded *Cryptophagus*.

In the key given by Lohse (1967, Freude, H., Harde, K.W. and Lohse, G.A. *Die Käfer Mitteleuropas* 7), these ran down to *C. falcozi*. Mr. R. Adams of the Ministry of Agriculture, Fisheries and Food Laboratories, Slough, very kindly compared a male and female with a specimen of *C. falcozi* bearing labels by both Falcoz and Roubal in the Laboratories' reference collection and has written that they compare exactly in external features. The parameres of the male, which Mr. Adams kindly remounted, agree with those illustrated by Lohse and also with those figured by Coombs & Woodroffe (1962, *Proc. R. ent. Soc. Lond.* B.31:103).

*C. falcozi* is a very rare species, at least in Europe. It was originally described in 1927 by Roubal (*Koleopt. Rdsch.* 13:31) from apparently a single specimen taken in Czechoslovakia. Bruce (1943, *Ent. Meddr.* 22:367) described as a new species *C. westi* from four females taken in Denmark in 1940 but Coombs and Woodroffe (1962) suggested, working from Bruce's description, that *C. westi* was conspecific with *C. falcozi* and, later, Woodroffe (1969, *Entomologist's mon. Mag.* 105:121) confirmed this by direct comparison of specimens. Mr. Bangsholt of the Zoologisk Museum, Copenhagen has very kindly looked up his collected records and advised me that there have been no further published Danish records of this species. Further, my inspection of the Danish national collection in the Zoologisk Museum by courtesy of Mr. Bangsholt revealed only specimens taken in 1940.

I have been able to find only one published record of *C. falcozi* in Britain. This was a male found alive in a new storebox made in London (Coombs & Woodroffe, 1962) and now in the reference collection of the Ministry of Agriculture, Fisheries and Food, Slough. The original specimen described by Roubal was found in association with the ant *Lasius fuliginosus* Latr. The specimens described by Bruce, however, were found in "schwämmigen Baummulm einer gestorbenen Buche" — exactly the habitat of the specimens from Windsor and this suggests that, in spite of its recent discovery, the species is present in Windsor as an ancient forest relict rather than as a recent introduction. It is true that other recent immigrant species such as *Aridius bifasciatus* Reitter and *Euophryum confine* Broun are now very much at home in the most ancient trees in Windsor Forest but these species are widely distributed in Britain and flourish in man-made as well as natural habitats. The discovery of *C. falcozi* at Windsor in winter is probably not of significance; the original specimen and the ones described by Bruce were found in the summer.

I thank Mr. Adams for confirming my determination and for providing information about the specimens at the Ministry of Agriculture, Fisheries and Food Laboratories, Slough. I must also thank the Nature Conservancy Council and the Crown Estate Office for permission to visit Windsor Forest. — J.A. OWEN, 8 Kingsdown Road, Epsom, Surrey: May 18th, 1981.

*Lomechusa emarginata* (Paykull) (Col., Staphylinidae) in north Lancashire. — I took two specimens of this species from a nest of *Formica fusca* L. under a large flat stone on a grassy slope near Warton Crag (SD 4972), on 15th April 1977. On 13th April 1979, a nest of *Myrmica sabuleti* Meinert under a small stone in the same locality produced a further three specimens. Unknown from Lancashire to Britten (1930, *Coleoptera* in Lawson, A.K. (Ed.), *A Check List of the Fauna of Lancashire and Cheshire*, Lancashire and Cheshire Fauna Committee) and recorded in Joy from 'Eng. S. to Yorks', it seems that these records represent an extension of the known northern limit of this species in the British Isles.

The capture of a single specimen of *Zyras limbatus* (Paykull) in a nest of *Lasius flavus* (F.) only yards from the *M. sabuleti* nest, and on the same day, is also worth noting. — H. MENDEL, The Museum, High Street, Ipswich IP1 3QH: June 16th, 1981.

## A NEW INDIAN SPECIES OF *PUROHITA* DISTANT (HOMOPTERA, DELPHACIDAE, FULGOROIDEA)

BY SURYA K. SHARMA & SAWAI SINGH

Of the known seven species of *Purohita* Distant, only two are recorded from India viz., *P. cervina* Distant and *P. arundinacea* Distant. In addition to these, the authors have collected a new species from Punjab during a survey of the delphacid fauna of Northwestern India which differs significantly from other species of the genus and is described below.

### Genus *PUROHITA* Distant

*Purohita* Distant 1906, Fauna British India 3:470.  
(Type-species; *Purohita cervina* Distant 1906, op. cit.)

### *Purohita punjabensis* sp. n. (Figs. 1-13)

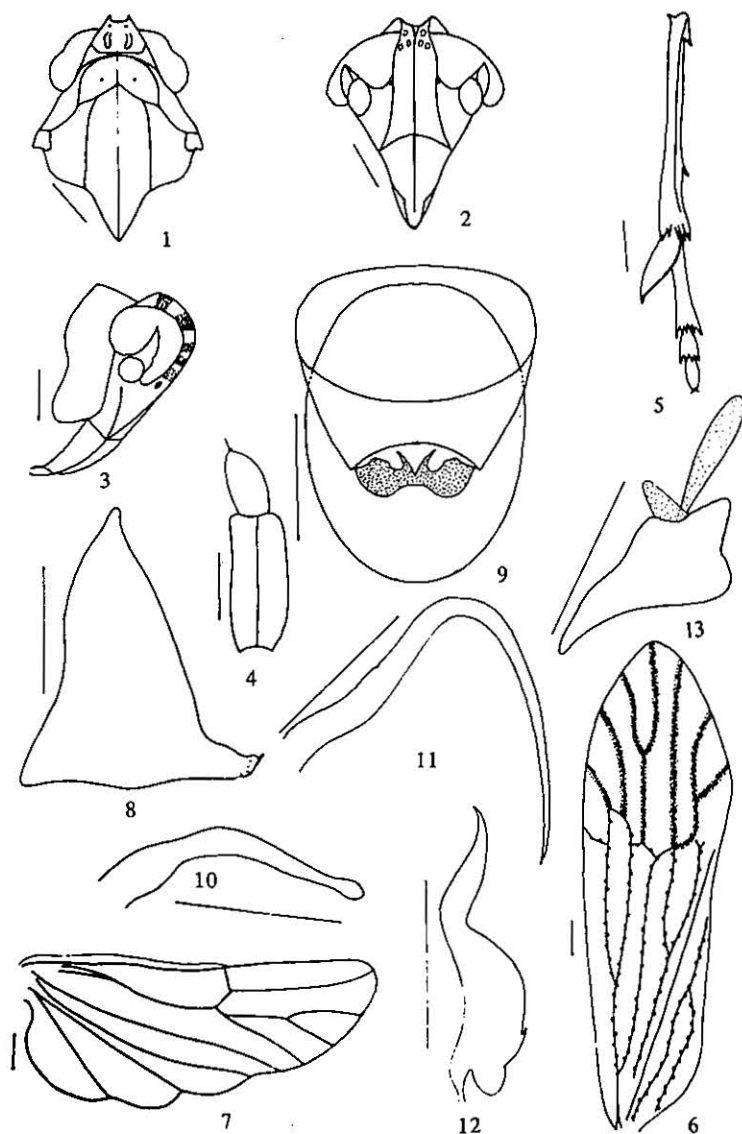
**Colour:** Ochraceous; carinae of vertex, anterior half of frons, clypeus, genae, antennae, pronotum, mesonotum and tegulae, pale yellow; posterior half of frons infuscate; eyes reddish-brown. Tegmina hyaline with pale suffusion, veins concolorous; finely granulose; wings milky hyaline with light fuscous veins.

**Size (mm):** Length of body from apex of head to tip of abdomen 3.10; vertex, width at base 0.26, median length 0.17; pronotal disc, width at anterior margin 0.20, median length 0.13; frons, width 0.38, length 0.53; postclypeus, width 0.28, median length 0.33; antennae, basal segment 0.81, second segment 0.29; tegmen, width 1.00, length 3.60; length of tibial spur 0.28.

**Body structure:** Vertex shorter medially than broad at base, narrow, extending a little before eyes, evenly rounding into frons, distinctly narrower at apex than at base, lateral margins straight, apical margin deeply notched, lateral carinae deeply foliate, median carina obsolete, Y-shaped carina missing; frons in middle line longer than wide at widest part, widest at apex, lateral margins strongly depressed and impressed between eyes, then concave up to apex, median carina simple, a little forked at extreme base; clypeus at base as wide as frons at apex, postclypeal disc longer than broad at base, in profile moderately convex, anteclypeus in profile shallowly convex, entire clypeus in profile moderately convex; genae broad, oblique transverse carina distinct, lateral ocelli distinct; eyes very deeply incised below; antennae with first segment, with a central ridge, second segment less than half the length of first, thickened but much narrower.

Pronotum in middle line shorter than vertex, pronotal disc rounded at anterior end, wider than long medially, lateral carinae convex, reaching the hind margin; mesonotum longer than broad, tricarinate, median carina reaching hind margin, lateral carinae strongly diverging basad, almost straight; legs robustly built, hind tibiae about 14 times as long as wide at middle, with two lateral and five apical spines arranged in a group of 2+3; hind-tibial spur long, robust, with outer and hind margins convex, no teeth on hind margin; tegmina about 3.5 times as long as wide, with a series of transverse veins at about one-third from apex, beyond which longitudinal veins are thickened, finely granulose.

**Male genitalia and anal segment:** Pygofer well developed, in lateral view broader ventrally, tapering dorsally, almost triangular in shape, posterior opening broader than long; diaphragm moderately broad, deep at middle, without any armature; medioventral process present in the form of shield covering the basal portion of parameres, apex divided into a pair of pointed processes and a pair of large blunt lobes. Aedeagus long, tubular, slightly curved medially, broad at base, narrow distally with apex bluntly



Figs. 1-13. *Purohita punjabensis* sp. n. 1, Vertex, pronotum and mesonotum; 2, Frons and clypeus; 3, Head in profile; 4, Antenna; 5, Hind leg; 6, Tegmen; 7, Hind wing; 8, Pygofer, lateral view; 9, Pygofer, posterior view; 10, Aedeagus; 11, Penis-guide; 12, Paramere, posterior view; 13, Anal segment, lateral view.

rounded, penis-guide very long, narrow sickle-shaped, pointed at apex, arising at base of aedeagus, reaching the base of parameres. Parameres long, laterally-compressed, base broad with a spine-like process on outer margin, bend in the middle and pointed apex.

Anal segment well developed, ring-like, obliquely produced laterally, lateroapical angles not produced, anal style long and fusiform.

*Holotype* Male, Sirhind (Punjab - 7.v.1977 on Aru (*Prunus persica* (L.) Batsch) in the Department of Zoology, Punjabi University, Patiala (India).

*Remarks.* This species comes nearer to *Purohita cervina* Distant, but differs appreciably from it in the shape of the vertex, antennal proportions, frons and male genitalia. The type-series of *P. cervina* consists of two females, so the comparison is made with the non-type males.

#### ACKNOWLEDGEMENTS

The authors are greatly indebted to Dr. (Mrs.) U. Krishnan for comparing the specimen with the type species in the British Museum (Natural History) London. Thanks are also due to Dr. S.S. Dhillon, Professor and Head, Department of Zoology, Punjabi University, Patiala for providing necessary laboratory facilities. Financial assistance by the University Grants Commission, New Delhi to one of us (S.K.S.) is gratefully acknowledged.

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February 11th, 1981.

*Deleaster dichrous* (Grav.) (Coleoptera, Staphylinidae) in Co. Down. - On 20 April 1981 I collected a single specimen of this species (*forma typica*) on a shingle bank at the margin of the Shimna River in Newcastle, Co. Down (I.G. J 371315). It was found resting among leaf debris under a large stone near the water's edge. The river was low at the time following a three week drought. Other beetles in the locality include species typical of this type of riverine habitat i.e. *Aloconota cambrica* (Woll.), *Aloconota currax* (Kraatz) (Staphylinidae), *Bembidion atrocoeruleum* Steph., *B. tibiale* (Duft.) and *B. decorum* (Zencker) (Carabidae).

Johnson and Halbert (1902, *Proc. R. Ir. Acad.* 6(3):535-827) refer to a single specimen ("variety *leachi*, Curt.") in the Haliday collection which was the only Irish example then known. They considered that this might be the specimen referred to by Hogan (1854, *Nat. Hist. Rev.* 1:98-101) and collected in the vicinity of Dublin by a Mr Egan. I know of no other Irish record of the species. - R. ANDERSON, Department of Agricultural and Food Chemistry, The Queen's University of Belfast: *May 6th*, 1981.

*Some records of marine insects from the intertidal sediments of the river Ythan estuary, Aberdeenshire.* – Marine insects have not been widely studied and the following records from the intertidal sediments of the estuary of the river Ythan, Aberdeenshire, may be of interest.

Large populations of the aleocharine staphylinid *Diglotta submarina* (Fairmaire & Laboulbène, 1856) were found in sandy sediments, larvae being present from April until June, often as many as 20 individuals being recorded in cores of 2.5 cm diameter. The larvae were observed feeding on the meiofauna associated with deposits of organic matter in the upper 1 cm of the sediment, specifically the free-living Nematoda and Harpacticoida (Crustacea, Copepoda). At low tide individuals of another staphylinid, *Staphylinus ater* Gravenhorst, 1802, were found searching for prey, these including members of the meiofauna and individuals of *Diglotta submarina*.

In the same sediments larvae of the anthomyiid *Fucellia maritima* (Haliday, 1838) were observed during spring and summer in smaller numbers, occurring in the upper half centimetre of unconsolidated sediment where beached sea-weeds occurred. During mid-summer and early autumn individuals of *Drosophila funebris* (Fabricius, 1887) were recorded from decaying sea-weeds overlying the sediments close to the high tide-line.

The final record concerns the chironomid midge *Halocladus* (*Psammocladus*) *braunsi* (Goetghebuer, 1942), whose occurrence in the area has been reported by Cranston & Hockin (1981, *Entomologist's Gaz.* 32:43-45). Larval populations approaching 1000 individuals per square metre of sand were found in aggregated populations associated with small drainage channels of ground water through the sandy beach, in late April. This flow of ground water must have reduced the interstitial salinity throughout the tidal cycle. However, there can be no doubt that this species can withstand prolonged exposure to sea-water, as populations were found towards the low tide-line where the salinity fluctuated between 20 and 33 parts per thousand (Goodman, K., 1980, Ph.D. thesis, University of Aberdeen). Aerial swarming of adults has also been recorded in late May, adults aggregating in the air, only a small distance off the ground and also on pebbles at the high tide-line.

My thanks are due to B.H. Cogan, P.S. Cranston, P.M. Hammond and J.E. Marshall for their help in identifying specimens sent to them at the British Museum (Natural History), London. – DAVID C. HOCKIN, Culterty Field Station, Department of Zoology, University of Aberdeen, Newburgh, Ellon, Aberdeenshire, Scotland: June 22nd, 1981.

*Agabus chalconatus* (Panz.) (Col., Dytiscidae) in the north of England. – Professor Balfour-Browne (1943, *Entomologist's mon. Mag.* 79: 124-125) first noted the occurrence of the two forms *chalconatus* (Panz.) and *melanocornis* Zimm. in Britain and he showed that the former occurred as far north as mid-west Yorkshire whereas *melanocornis* ranged throughout Britain and was also found in Ireland. Most authorities recognise that the forms are distinct species with an extreme difference in the parameres. Despite an appeal for records, Balfour-Browne was later (1950, *British Water Beetles*, 2: 119) unable to add to the first vice-comital map of *chalconatus*. There have been a few published records since then which fill out the distribution in southern England but I have not seen specimens taken further west than the New Forest. Three records are known to me for northern England. J.A. Morton sent me a male from Gosforth Park, South Northumberland, taken on 5 December 1960. M.D. Eyre has recently submitted several specimens from a pool in a forestry drain in Wynyard Forest, County Durham taken on 30 May 1981. In fourteen years of collecting in the north of England I have only found the true *chalconatus* once – in company with *melanocornis* in a ditch filled with *Sphagnum auriculatum* Schimp. in a larch plantation on Lazonby Fell, Cumberland on 20 July 1980. All three records are for shaded water in man-made forests; there is a reasonable probability that this species will be found in the afforested areas of southern Scotland. – G.N. FOSTER, 20 Angus Avenue, Prestwick, Ayrshire, KA9 2HZ: August 4th, 1981.

THE SCALE INSECT *ARCTORTHEZIA CATAPHRACTA* (OLAFSEN)  
(HEMIPTERA, COCCOIDEA) IN THE MUSEUM AND ART GALLERY,  
PERTH, AND A DISCUSSION OF E. OLAFSEN'S  
REISE IGIENNEM ISLAND

BY D.J. WILLIAMS

Among some scale insects in the Museum and Art Gallery, Perth, are a few collected by F. Buchanan White. Dr. M.A. Taylor, Keeper of Natural Sciences, kindly sent on loan the specimens on card points. Although these are all *Arctorthezia cataphracta* (Olafsen) it seems certain that they represent specimens originally named *Orthezia signoreti* Buchanan White. There is no reasonable doubt that one specimen labelled Glen Tilt [Perthshire] 3000 ft,  $\gamma$ , is part of the original material described as *O. signoreti* by Buchanan White (1877) who illustrated the antenna of the adult  $\gamma$  as Fig. 1.  $\gamma$ . This specimen, now prepared on a microscope slide, is here selected as lectotype and deposited in the Museum and Art Gallery, Perth. Buchanan White described the species as living below mosses in the cushions of *Racomitrium lanuginosum* (Hedw.) Brid.

Other specimens of the same species collected by Buchanan White are represented by 15 adult females and immatures labelled Glen Tilt, 4 adult females labelled B71, Braemar collected in 1871 and 2 specimens labelled A, which Dr. Taylor states are in Buchanan White's handwriting, and may have been collected at Achilty (Ross-shire, 1868/69) or Atholl (Perthshire, 1875).

Some further material of *A. cataphracta* collected by the Perthshire Society of Natural Sciences is represented by specimens collected at Kinnoull Hill and Minkie Moss, both localities lying close to Perth.

Buchanan White (1877) compared his specimens of *O. signoreti* with some of his own specimens of *O. urticae* (L.) collected in the south-west of Scotland but these are not available and are probably lost. *O. signoreti* was also mentioned by Buchanan White (1878) from Glen Tilt and by Buchanan White (1880) discussing the known species of *Orthezia*. These are the only publications of F. Buchanan White discussing scale insects, taken from the long list of his publications by Trail (1898).

The name *O. signoreti* was first synonymised with *O. cataphracta* by Douglas (1881) who had studied specimens sent to him by Buchanan White. Morrison (1952) ignoring the name *O. signoreti* Buchanan White accepted the combination *Ortheziola signoreti* (Haller) based on *Orthezia signoreti* Haller, 1880, in place of *Ortheziola vej dovskiyi* Šulc. Varshney (1964) discussed the homonymy and rightly resurrected the name *Ortheziola vej dovskiyi*.

*Arctorthezia cataphracta* was first described from Iceland as *Pediculus cataphractus* by E. Olafsen, 1772, *Eggert Olafsens og Biarno Povelsens*