

## A NEW *CLASTOPTERA* FROM SAGEBRUSH (RHYNCHOTA: HOMOPTERA: CERCOPIDAE)

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### ABSTRACT

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*Clastoptera atrapicata* n. sp. (Homoptera: Cercopidae) is described from sagebrush (*Artemisia tridentata* Nutt) in central British Columbia and Oregon. This species is closely allied to *C. brunnea* Ball, and, like it, exhibits considerable variation in colour pattern of the face. The ovipositor and colour varieties are illustrated and compared with those of its related species.

The genus *Clastoptera* in America north of Mexico was revised by Doering (1928) to include 29 species. Of these, six were distinctive in having fewer pronotal striae (10 or fewer on midline) than the other species, and in having arid-adapted hosts: sagebrush (*Artemisia tridentata* Nutt) and rabbit brush (*Chrysothamnus* spp.). Two of these six, *sierra* Doering and *binotata* Ball, are wholly black in both sexes; one, *delicata* Uhler, is yellow with black pronotal bars in both sexes; and in the remaining three, the males are black and the females are yellow with black pronotal bars. To the latter group I now add a fourth previously unrecognized species.

*Clastoptera atrapicata* n. sp.

(Figs. 7-10, 12, 16, 17)

Body form as in other *Clastoptera*, but with frons considerably inflated, tylus longer than median length of vertex in both sexes, in dorsal aspect with tylus appearing about as long as median length of vertex (Fig. 12). Length: male, 2.9-3.5 mm; female, 3.2-4.2 mm.

*Male.* Colour blackish-brown except for pale areas on tegmina around bullae, yellow spot at centre of costa, and yellow spots on lora; similar to *C. brunnea* Ball in colour. Male genitalia as in *brunnea* (Doering 1928, pl. XXV, fig. 3).

*Female.* Colour pale yellow, overlaid with two heavy black bars across fore margin of pronotum and between eyes, and finer brown lines (6-9 in number) across pronotum; face variously marked with fuscous and black (Figs. 7-10); tegmina mottled with fuscous, paler on apical cells and along edge of transverse creases; legs pale, banded with fuscous; similar to *brunnea* in colour.

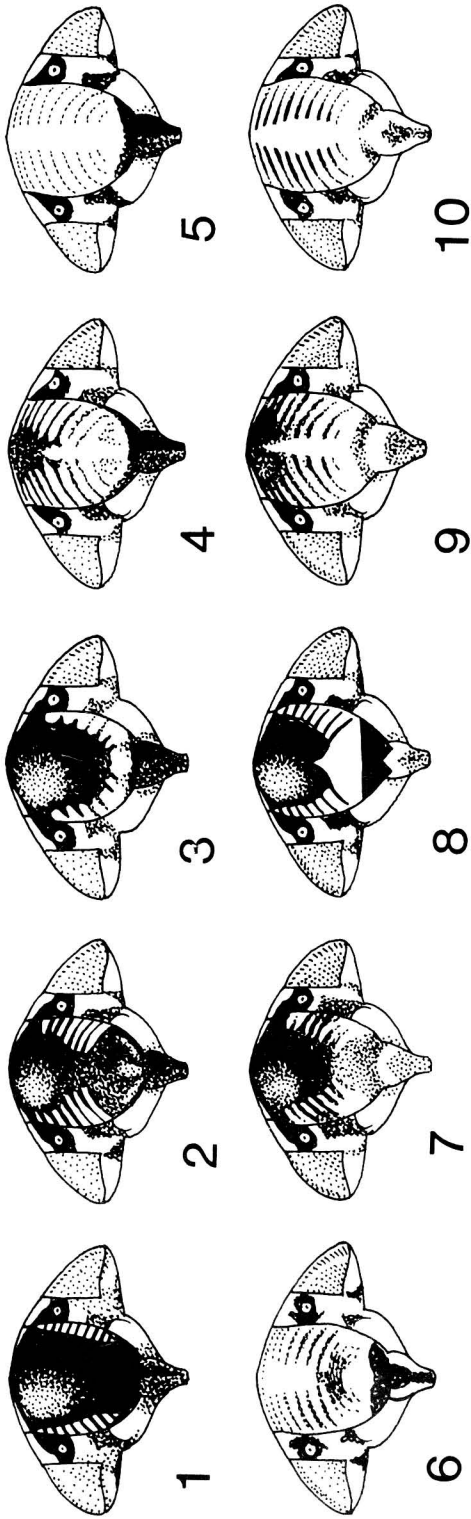
Inner rami of ovipositor parallel-margined on basal half, strongly tapered apically, ventral margin curved dorsad, dorsal margin straight, armed with two close-set teeth near midlength (Figs. 16, 17); similar to ovipositor of *C. lugubris* Ball.

*Types.* Holotype ♀, Seton L., Lillooet, B.C., 30 June 1926 (J. McDunnough) on sagebrush. Paratypes: 14♂♂, 6♀♀, same data as holotype; 5♂♂, 13♀♀, 17 mi SE Spences Bridge, B.C., 8 Aug. 1976 (K. G. A. Hamilton) on sagebrush; 1♂, SE slope Glass Butte, 12 mi E Hampton, Lake Co., Ore., 12 July 1968 (J. D. Lattin) 68-27; 1♀, 14 mi N Burns, Harney Co., Ore., 14 Aug. 1971 (P. W. Oman). Holotype and 38 paratypes no. 14073 in the Canadian National Collection, Ottawa; 2 paratypes in the collection of Oregon State University, Corvallis.

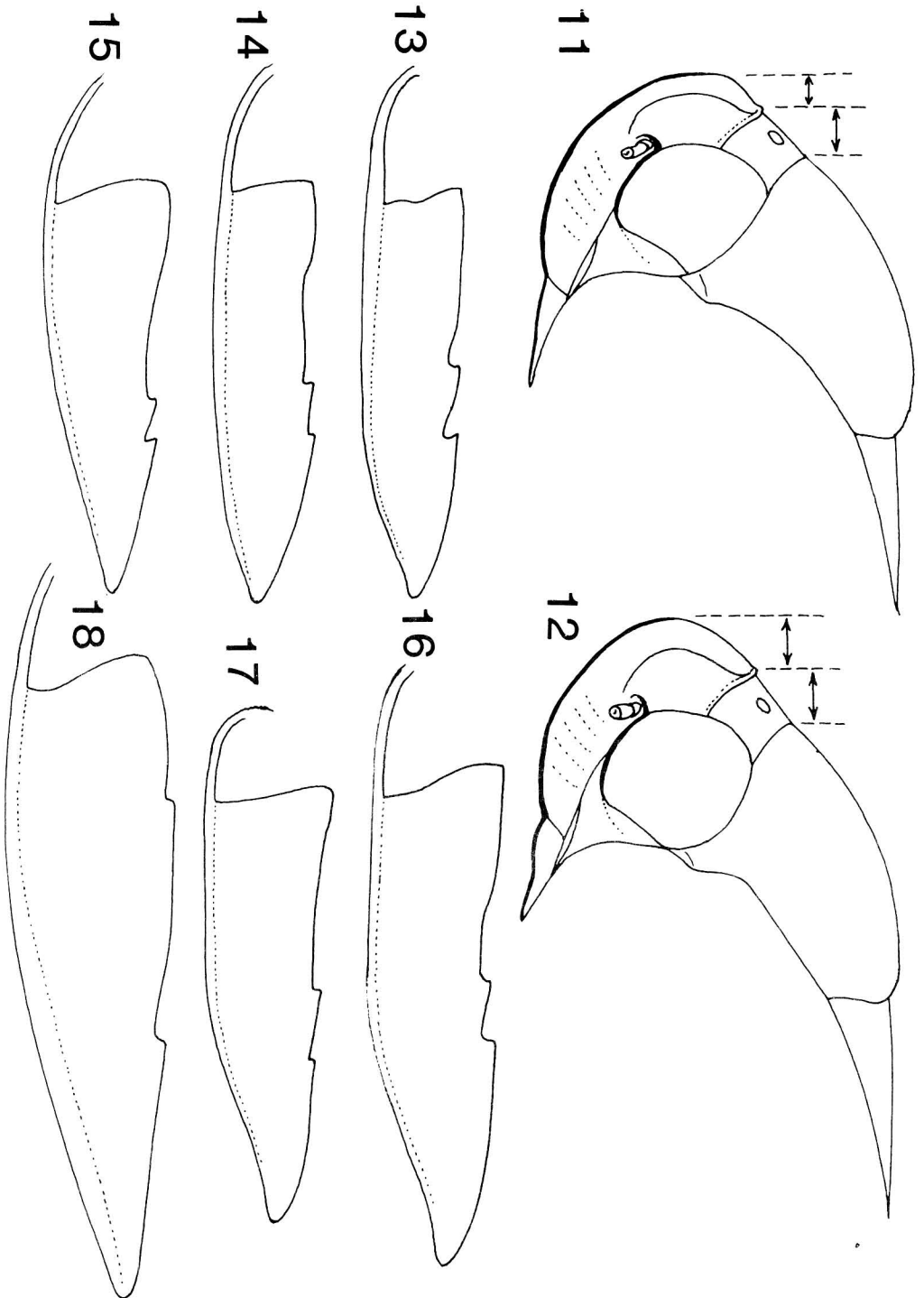
*Remarks.* *C. atrapicata* is closely allied to *brunnea* Ball, *lugubris* Ball and *lineatocollis* Stål. Males of *atrapicata* may be distinguished from all three by the more strongly inflated frons and longer tylus (Fig. 12). In dorsal aspect the tylus appears to be as long as the vertex, while in the three allied species the tylus appears half as long (Fig. 11). Males of *lugubris* and *lineatocollis* also have more extensive pale markings on the face (Doering 1928, pl. IV, fig. 2a).

Females of *lugubris* differ from those of *atrapicata*, *brunnea* and *lineatocollis* in their larger size (3.6-4.6), in having the tylus very strongly produced, in dorsal aspect longer than the vertex, and in having the pronotal bars of equal width and darkness with the interocular bar.

Females of *atrapicata* can be distinguished from those of all its other relatives by the shape of the apex of the inner rami of the ovipositor, and by the placement of the ovipositor teeth near the centre of the blade (Figs. 16, 17). The facial markings of *atrapicata* are also distinct: the base of the clypellus always has a pale transverse band (Figs. 7-10) not found in *brunnea* and *lineatocollis* (Figs. 1-6); furthermore, the majority of specimens have the upper half of the frons black (Figs. 7-8), a condition not found in related species. The variability of the facial markings show the close relationship between *brunnea* and *atrapicata*.



Figs. 1-10. Facial patterns in Clasptoptera species. 1-5, *C. brunnea* Ball; 6, *C. lineatocollis* Stål; 7-10, *C. atrapicata* n. sp.



Figs. 11-12. Profile of head and pronotum of *Clastoptera* species with apparent extent of frons and vertex from dorsal aspect indicated by arrows. 11, *C. brunnea*; 12, *C. atrapicata*.

Figs. 13-18. Ovipositor blades of *Clastoptera* species, lateral aspect. 13, 14, *C. brunnea*; 15, *C. lineatocollis*; 16, 17, *C. atrapicata*; 18, *C. delicata* Uhler.

## ACKNOWLEDGEMENTS

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## Reference

- Doering, K. C. 1928. The genus *Clastoptera* in America North of Mexico. *Kans. Univ. Sci. Bull.* 18 (1): 5-153.

***PTEROSTICHUS STRENUUS* PANZ.,  
A NEWLY-DISCOVERED PALAEARCTIC SPECIES IN THE  
VANCOUVER AREA (COLEOPTERA: CARABIDAE)**

There are about 17 species of palaeartic Carabids known to be introduced from Europe into British Columbia, largely to the Vancouver area. Most were known for some time but some were discovered only recently. Lindroth (1957), in his excellent treatise on faunal connections between Europe and North America, postulated that practically all of those species were introduced with ship's ballast (Scudder 1958). An attempt is being made by the Entomological Society of Canada in its Biological Survey Project to collect all the available data on the distribution of introduced *Carabidae* in this province. I hope to compile a detailed list of the species with their known places of occurrence in the near future. Thus, this note may be of interest.

To the list of introduced species compiled from Lindroth's monograph (1963-1969) and supplemented by my own collecting and observation during the past 29 years I am able to

add *Pterostichus strenuus* Panz., which has been taken recently in Vancouver.

The first specimen, a female, was collected on 8 June, 1968 on the marshy edge of a ditch, close to Beaconsfield Park in East Vancouver. All attempts to collect more specimens at the time were unsuccessful. Three more specimens, a male and two females, were collected by Prof. G. G. E. Scudder of UBC on 21 August, 1973 in a marshy area at the foot of Olympic Street in Vancouver (UBC Coll.). These specimens are at present the only records from the Pacific Coast of North America.

*Pterostichus strenuus* is distributed through the whole northern Palaearctic. In North America it has been known since 1937, restricted to a small area of southeastern Newfoundland, where it is a species of open, moderately moist grassland, often close to the sea (Lindroth, 1955). In Vancouver it appears to be more hygrophilous and less common.

## References

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