# *Hydroecia nordstroemi* n. sp. (Lepid. Noctuidae).

By

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During some years of moth-collecting on Oeland a moth of the genus *Hydroecia* Gn. has appeared every year at my lamp from the middle of July until the beginning of Sept. I have hitherto considered it a melanistic form of *H. micacea* Esp. It shows, however, when I made an investigation of the genitalia, that distinct differences existed and renewed investigations have confirmed my opinion that these differences were constant. As I can see no conformity in this respect with any of the palearctic species, described by Warren (1914), I consider it a distinct species, which has hitherto been overlooked, because of its great resemblance to *micacea*. I therefore propose to name it *nordstroemi* n. sp. (fig. 1 *a* and *b*).

The mere brushing off of the hairs from the tip of the abdomen is sufficient to show the difference between the male of *nordstroemi* and our two other species of *Hydroecia*, *micacea* Esp. and *petasitis* Dbld. In the two latter species cucullus is furnished with distinct corona and the point of the strongly chitinized harpe is turned backwards and crosses the lower angle of cucullus (see fig. 2 *d* and, with regard to *petasitis*, Nordström's fig. 134 in Svenska Fjärilar, p. 186). In *nordstroemi* (fig. 2 *a*), on the other hand, corona is lacking and harpe is distinctly separated from cucullus, rather parallel with its posterior edge and is perpendicularily projecting beyond the lower edge of the valva.

Uncus with *smoothly* pointed end, not tongue-shaped as in *petasitis*.

The distal end of aedoeagus in *nordstroemi* (fig. 2 *b*) is furnished with two large, more weakly chitinized plates with one, *respectively two*, stronger chitinized spines and in front of these a field, characteristic for the species, with more than 20 robust, pointed, strongly chitinized spines, with the points turned backwards. In *micacea* aedoeagus (fig. 2 *e*) has one weakly chitinized plate at the distal end and before this a bulbous cornutus; the ventral outside of aedoeagus is dentated at the orifice. As to *petasitis*, which, in lack of material, I have not been able to examine, Pierce says (1909): »aedoeagus dentated at the orifice; vesica with strong short bulbed cornutus».

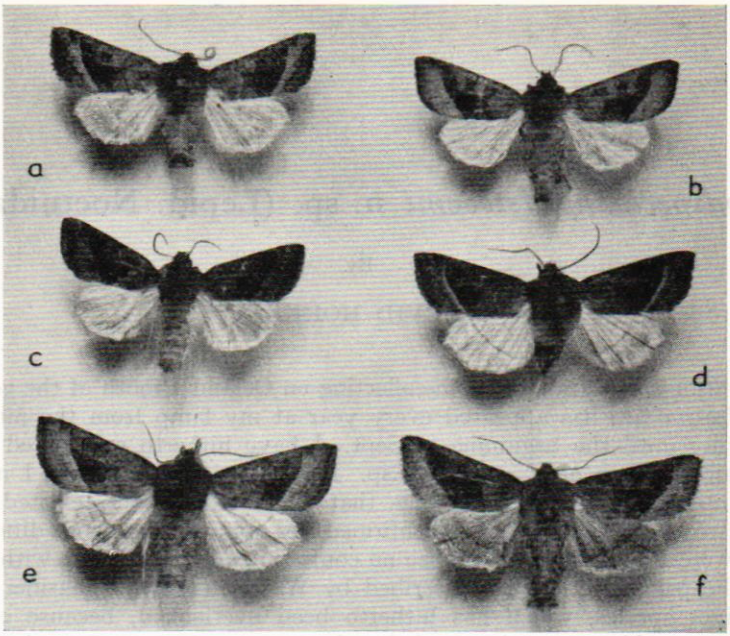


Fig. 1. *Hydroecia nordstroemi* n. sp.: *a.* holotype ♂ 11/8 1950; *b.* allotype ♀ 4/9 1948; *c.* and *d. ab. fuscata* n. ab. ♂ 15/8 and ♂ 11/8 1950; *e.* and *f.* transitional forms, ♂ 15/8 1950 and ♀ 2/9 1948. All the specimens from Räpplinge, Oeland.

Ostium bursae in the female of *nordstroemi* (fig. 2 *c*) is strongly chitinized at the ventral side and densely clothed with very small spines; the length of ostium is larger than the breadth. Ductus bursae is striated and has a couple of narrow plates of chitin, clothed with very fine spines. Bursa with the rear part narrow, striated, softer chitinized and with a piece of chitin at the distal end; the anterior part of bursa is composed of a large, glassy, transverse bladder with its point turned to the left (in situ) and with two ventral and two dorsal, finely pointed strips of chitin, signa. Ductus seminalis starts from the distal end of the posterior part of the bursa. The breadth of ostium in *micacea* (fig. 2 *f*) is greater than the length and at the ventral side there are two distinct strips. Ductus bursae lacks all plates. Bursa wider, narrowing backwards and with the point of the anterior, glassy bladder turned onwards. Pierce says (1942) as to *petasitis*, only: »ostium slightly arched, spined, bulbed below. Ductus bursae short.»

*Hydroecia nordstroemi* is, as previously said, in its exterior very like *micacea*, but the shadow, inside the elbowed line, is in *nordstroemi*

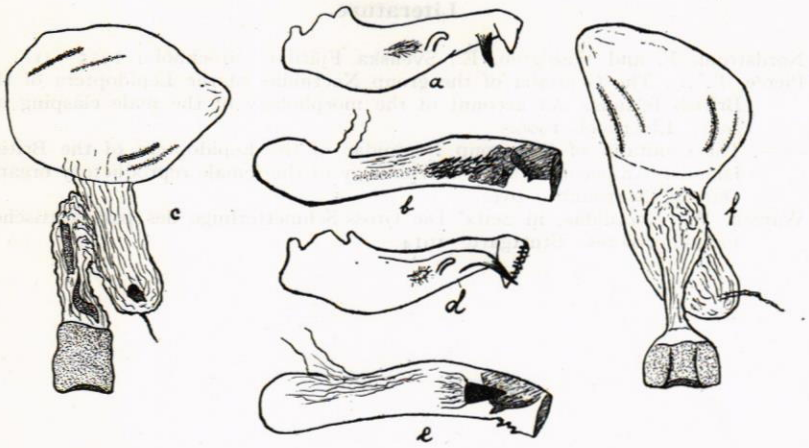


Fig. 2. a–c. *Hydroecia nordstroemi* n. sp. *a.* valva; *b.* aedoeagus; *c.* bursa copulatrix (ventral view); d–f *H. micacea* Esp. *d.* valva; *e.* aedoeagus; *f.* bursa copulatrix (ventral view). Magnification a, b, d and e = Ca 15 ×; c and f = Ca 10 ×.

dark chocolate-brown, not reddish as in *micacea*, where, moreover, it is often lacking. The moth is not scarce and comes willingly to the lamp, the male at least. I have altogether used 29 ♂♂ and 3 ♀♀ for the description, all from Räpplinge on Oeland. The expanse of wing varies, in the male 24—35 mm., in the female 31—36 mm. As most of the species of Lepidoptera often show smaller expanse of wing in their forms from Oeland, is to be expected that eventual specimens of *nordstroemi* from the mainland will show larger expanse of wing.

Dates for all the specimens are: ♂ 17.7. 1950; 2 ♂♂ 20.7. 1947; 3 ♂♂ 23.7. 1949; ♂ 24.7. 1949; 10 ♂♂ 28.7. 1949; ♂ 9.8. 1949; 3 ♂♂ 11.8. 1950; ♂ 12.8. 1950; 2 ♂♂ 15.8. 1950; ♂ 16.8. 1950; 3 ♂♂ 17.8. 1950; 1 ♂, 1 ♀ 20.8. 1947; ♀ 2.9. 1948 and ♀ 4.9. 1948. My earliest specimen of *micacea* from the same locality is dated 3.9. 1948. Thus the flying-time is earlier for *nordstroemi* and may approximately be appreciated at the middle of July — the beginning of Sept.

*Hydroecia nordstroemi ab. fuscata* n. ab. has the whole surface of the wings dark chocolate-brown and the pattern almost quite disappeared except the inner and the elbowed lines and the subterminal line, which all are light. There are transitional forms between the type-form and *ab. fuscata*, but they are hardly worth being named.

I have named the moth after our wellknown lepidopteralogist, Ph. Dr Frithiof Nordström, Stockholm, my revered friend and tutor, and I avail myself of the opportunity to bring him my cordial thanks for all kind assistance and guidance throughout the years.

## Literature.

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