

Hydraecia ultima nov. spec.
(Lepidoptera, Noctuidae).

By
Preben L. Holst.

Among specimens of *Hydraecia micacea* Esp. I have found some obviously different from it in regard to the genitalia, and when separated from it different in appearance, too. To ensure that the species had not been described previously I sent a male and a female to Mr. C. Boursin in Paris for examination. He did not know the species either, but asked me to examine the types of *Hydraecia micacea* ab. *brunnea* Tutt, ab. *intacta* Warren, and ab. *discolor* Krulikowski which he had not seen himself.

Dr. I. W. Beresford Nye of the British Museum answered to my question that there is no type specimen of ab. *brunnea* Tutt, and that the type of *intacta* Warr. is only a form of *H. micacea* Esp. Further, he told me that the Nearctic species *Hydraecia perobliqua* Hampson is different from my specimens.

Unfortunately, I have not got the answer if ab. *discolor* Krul. is identical with my species or not in time for printing in this paper. However, I do not suppose this to be serious.

I therefore consider the specimens to belong to a n o v a s p e c i e s. For the new species I propose the name *Hydraecia ultima*.

Hydraecia ultima nov. spec.

A p p e a r a n c e. The general appearance is rather close to that of *H. micacea* Esp., but differs in the following details, see fig. 1.

Fore-wings narrower, with a more angular inner cross-line, the dorsal part of it being almost parallel to the outer which, itself, is placed more inclined on the fore-wing. Colour a plain reddish brown with a lilac tint, without the light band outside the outer cross-line which is nearly always present in *micacea*. Although the colour in *micacea* is very variable the author has seen no specimens with exactly that colour.

Hind-wings without central markings, cross-line running nearer to the apex. Colour a light yellow-grey, outside the cross-line with a cloudy grey cover.

On the underside central markings can be present or missing, while I have never seen a *micacea*-specimen without central markings. In ab. *immaculata* Hoffmeyer (Hoffmeyer 1958), however, there are no markings, and Dr. S. Hoffmeyer has informed me that the type specimen is a true *micacea* Esp.

Alar expanse variable like in other species of the genus — the author has seen 28—41 mm.

Mr. E. Wilsund has pointed out to me that the specimen shown as *Hydraecia micacea* Esp. by Klöcker (1913) belongs to *H. ultima* n. sp.; it is here figured once again as fig. 1, b. The specimen shown as fig. 1, i has, too, been figured once as *H. micacea* Esp. — in an article by the present author (P. Holst 1957).

Genitalia. The differences from the other species of the genus *Hydraecia* Gn. are great in both sexes, the closest relative seems to be *micacea* Esp. from which differences are mentioned beneath. Fig. 2 shows the genitalia of some examples of *H. ultima* n. sp., and some *H. micacea* for comparison.

Male. Uncus very slender. Peniculus (10. tergit) very broad. Cucullus very great, rounded at the bottom, and placed more inclined to the valva than in the previously known species of the genus, wearing a corona consisting of many, very strong thorns. In the material examined 10—18 thorns have been counted, in *micacea* 2—12 thorns. Clasper short, broad, weakly sclerotized, directed almost as in *micacea*. Aedoeagus relatively slender, only the great cornutus well developed, but short.

Dr. E. Urbahn mentions in an article (1962) that he has counted 2—18 thorns in the corona of *micacea* — he answered to my question that he had seen only a few specimens with more than 10 corona-thorns, and sent pictures of the genitalia of some male specimens from his material. Two of these proved to belong to *ultima* n. sp. They will be published later by Dr. Urbahn.

Female. Papilia analis with longer hairs than in *micacea*. Antrum very narrow, length about 4,5 times hight — 2,6 times in *micacea*. Ductus bursae weakly sclerotized.

Biology. Dates of the material examined 25.7—5.9. Early stages unknown.

M a t e r i a l e x a m i n e d.

1. ♂, labelled: *Hydraecia ultima* ♂, Holotypus design. 14.3.1964, P. L. Holst. Dania, Nord-Sjælland, Rødovre 6.8.1954, O. Kragh leg. Gen. Præp. PLH 378.
2. ♀, labelled: *Hydraecia ultima* ♀, Allotypus design. 14.3.1964, P. L. Holst. Dania, Nord-Sjælland, Krogstrup 19.8.1954, Coll. T. Feddersen. Gen. præp. PLH 379.
3. ♂, Dania, Nord-Sjælland, København, Carlsberg fyr 25.7.1899, Coll. A. Klöcker. Gen. præp. PLH 377.
4. ♂, Dania, Nord-Sjælland, København, Carlsberg, Coll. A. Klöcker. Gen. præp. PLH 380.
5. ♀, Dania, Nord-Sjælland, Rødovre 4.9.1962, P. L. Holst leg. Gen. præp. PLH 574.
6. ♀, Dania, Syd-Sjælland, Strøby jerne 16.8.1947, N. L. Wolff leg. Gen. præp. NLW 3025.
7. ♀, Dania, Bornholm, Boderne 26.7.1963, N. Madsen leg. Gen. præp. PLH 375.
8. ♀, Dania, Bornholm, Knudske 15.8.1955, P. L. Holst leg. Gen. præp. PLH 565.
9. ♂, Suecia, Skåne, Källstorp 16.8.1942, Coll. E. Sylvén.
10. ♀, Dania, Bornholm, Svaneke 29.7.1959, G. Pallesen leg.
11. ♂, Dania, Bornholm, Rø 28.7.1959, E. Wilsund leg.
12. ♀, Dania, Bornholm, Saltuna 1.8.1960, E. Wilsund leg.
13. ♂, Dania, Nord-Sjælland, Rødovre 6.8.1964, P. L. Holst leg.
14. ♂, Dania, Syd-Sjælland, Jungshoved 15.8.1964, N. L. Wolff leg. Gen. præp. NLW 3127.
15. ♀, Dania, Nord-Sjælland, Fortunen 9.8.1947, W. van Deurs leg.
16. ♀, Dania, Nord-Sjælland, København Ø. 18.8.1964, N. L. Wolff leg.

Fig. 1. Appearance, nat. size.

- a. *Hydraecia ultima* n. sp., male, Holotypus, specimen no. 1.
- b. do., male, specimen no. 3.
- c. do., male, specimen no. 9.
- d. do., male, specimen no. 13.
- e. *Hydraecia micacea* Esp., male, labelled Dania, Bornholm, Knudske 14.8.1955, P. L. Holst leg. Genital slide PLH 570.
- f. do., male, labelled Dania, Syd-Sjælland Højstrup 9.8.1962, E. Worm-Hansen leg. Genital slide PLH 579.
- g. *Hydraecia ultima* n. sp., female, Allotypus, specimen no. 2.
- h. do., female, specimen no. 8.
- i. do., female, specimen no. 6.
- j. do., female, specimen no. 25.
- k. *Hydraecia micacea* Esp., female, labelled Dania, Nord-Sjælland, Rødovre, L. Fragaria 29.6.1963, K. L. Holst leg. Genital slide PLH 580.
- l. do., female, labelled Dania, Nord-Sjælland, Rødovre 21.7.1961, P. L. Holst leg. Genital slide PLH 582.

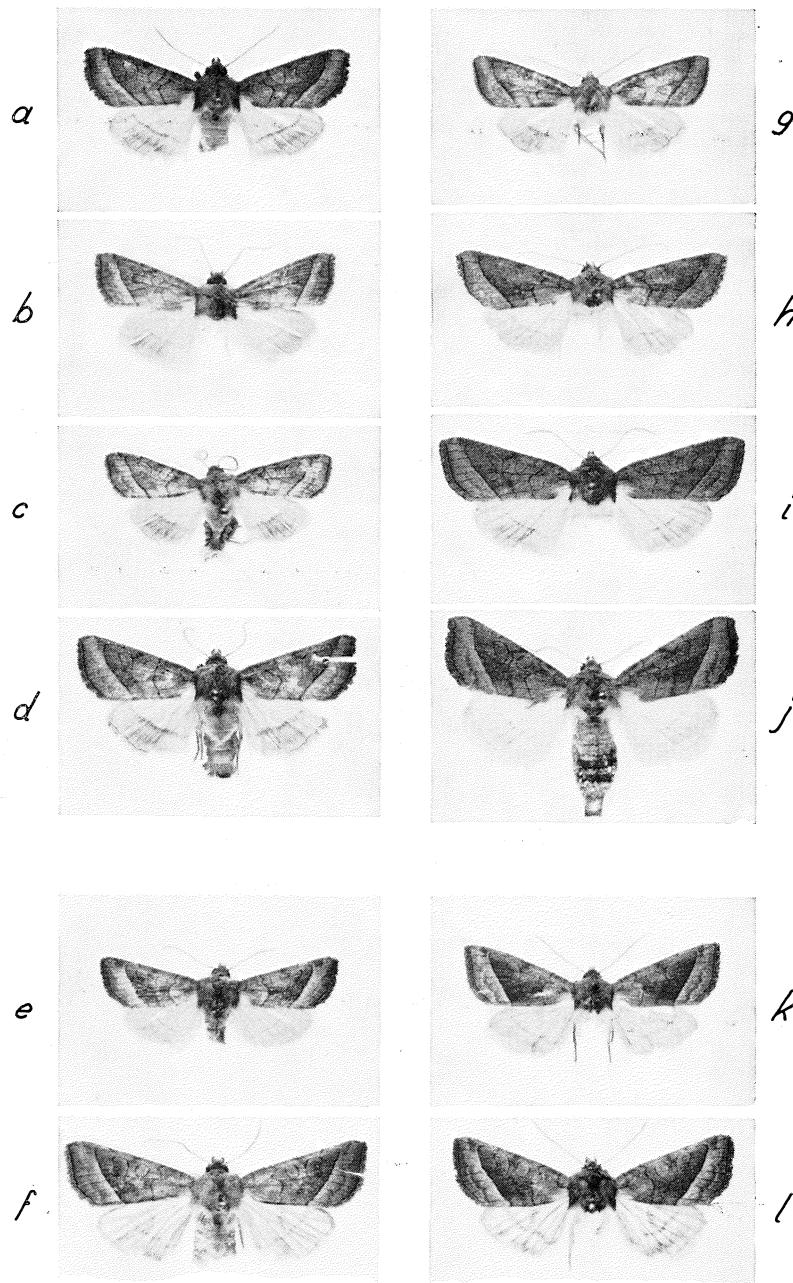


Fig. 1.

B. W. Rasmussen phot.

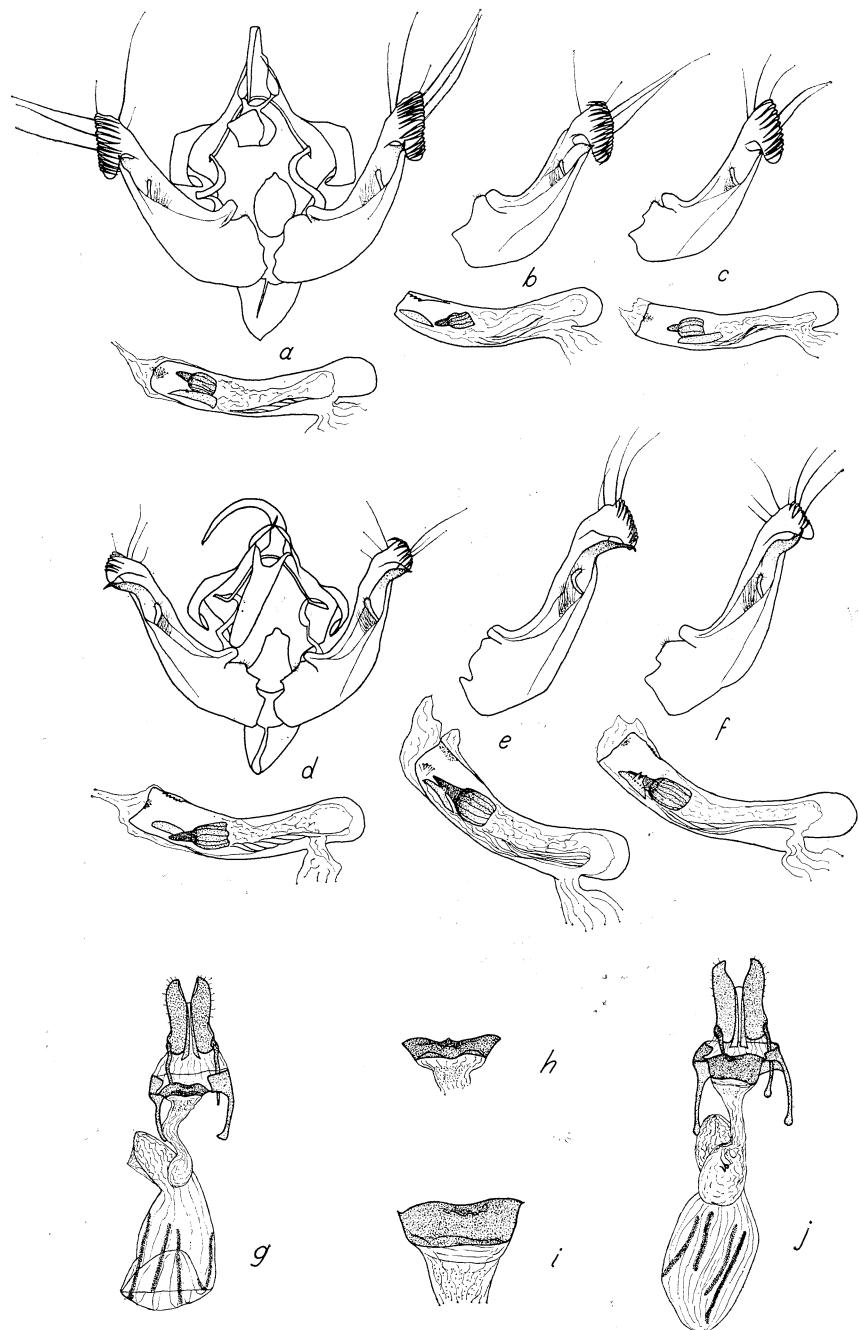


Fig. 2.

P. L. Holst prep. & del.

17. ♂, Dania, Bornholm, Ølene 24.7.1959, K. Hartmann-Petersen leg.
18. ♂, Dania, Bornholm, Saltuna 14.8.1957, F. Scheppler leg.
19. ♀, Dania, Nord-Sjælland, Ermelunden 15.8.1945, P. Forum-Petersen leg.
- 20—25. 3 ♂♂, 3 ♀♀, Suecia, Skåne, Eslöv 5.8.1934, Coll. N. Burrau.
26. ♂, Suecia, Skåne, Eslöv 6.8.1935, Coll. N. Burrau.
27. ♀, Suecia, Skåne, Wittsjö 1.8.1935, Coll. N. Burrau.
28. ♀, Suecia, Skåne, Munka Ljungby 23.8.1936, Coll. N. Burrau.
- 29—30. 2 ♀♀, Suecia, Skåne, Magnarp 19.8.1941, Coll. N. Burrau.
31. ♀, Suecia, Skåne, Lund 12.8.1933, Coll. N. Burrau.
- 32—33. 2 ♂♂, Suecia, Skåne, Lund 1.8.1945, Coll. N. Burrau.
34. ♀, Suecia, Skåne, Lund 7.8.1945, Coll. N. Burrau.
35. ♂, Suecia, Skåne, Lund 21.8.1946, Coll. N. Burrau.
36. ♀, Suecia, Skåne, Lund 10.8.1947, Coll. N. Burrau.
37. ♀, Suecia, Skåne, Lund 12.8.1953, Coll. N. Burrau.
38. ♂, Suecia, Skåne, Österslöv 2.8.1953, I. Svensson leg.
39. ♀, Suecia, Skåne, Österslöv 28.7.1956, I. Svensson leg.
40. ♀, Suecia, Skåne, Österslöv 5.9.1964, I. Svensson leg.

Specimens no. 1—4 incl. genital slides are preserved in the collection of the Zoological Museum of Copenhagen, the holotypus kindly donated by Mr. O. Kragh, the three others found among *micacea*-specimens in the collection of the museum. Specimen no. 9 is in the collection of the University of Lund. The rest of the specimens are in the collections of the finders.

Acknowledgements.

I wish to express my sincere thanks to Mr. N. Madsen who at first draw my attention to the new species, because he gave me the specimen of his for examination believing that he had caught a specimen of *Hydraecia nordstroemi* Horke with light hind-wings. Further I wish to thank Mr. C. Boursin, Dr. I. W. Beresford Nye, Dr. S. Hoffmeyer, and Mr. N. L. Wolff for their assistance with

Fig. 2. Genitalia, $\times 10$ — g and j $\times 5$.

- a. *Hydraecia ultima* n. sp., male, Holotypus, specimen no. 1.
- b. do., male, valva and aedeagus, specimen no. 3.
- c. do., male, valva and aedeagus, specimen no. 4.
- d. *Hydraecia micacea* Esp., male, genital slide PLH 570.
- e. do., male, valva and aedeagus, genital slide PLH 572.
- f. do., male, valva and aedeagus, genital slide PLH 577.
- g. *Hydraecia ultima* n. sp., female, Allotypus, specimen no. 2.
- h. do., female, antrum, specimen no. 7.
- i. *Hydraecia micacea* Esp., female, antrum, genital slide PLH 571.
- j. do., female, genital slide PLH 582.

the determination of the species, Mr. B. W. Rasmussen for the fine photographs, and finally the collectors mentioned above for the loan of material used for this work.

Bibliography.

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- Holst, P., 1957: To nye danske sommerfugle: *Hydroecia nordstroemi* Horke og *Perizoma hydrata* Tr. — Ent. Medd. 28, p. 145—150 (København).
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- Urbahn, E., 1962: Genitalvariabilität bei *Hydraecia nordstroemi* Horke, (Lep. Noct.) — Deutsch. Ent. Zeit., N. F. 9, p. 264—270 (Berlin).

Anmeldelse.

Ellazimse: **The Type Material of I. C. Fabricius.** — Munksgaard, Copenhagen 1964. 656 pp. Pris: 149.50 kr.

Resultatet af års arbejde, der fra en begrænset start kun omhandlende typematerialet i København, efterhånden udviklede sig til et omrent fuldstændig studium over det af I. C. Fabricius efterladte type-materiale, idet samlingerne i Kiel, London og Paris også blev inddraget, er nu nedfældet i denne bog. Den berømte danske entomolog nåede at navngive næsten 10.000 arter, for det meste insekter. Disse arter er nu ordnet i en fortægnelse, der er tilføjet, hvad man ved om typerne: hvor typerne findes, i hvormange eksemplarer, hvilke eksemplarer, der må anses for egentlige typer, dvs. er omtalt i den første artsbeskrivelse, der med angivelse af findestedet er citeret for hver enkelt art. Evt. udvælgelse af lectotyper o. l. er også anført. Takket være forfatterens indsats, der i mange tilfælde har været et indviklet detektivarbejde, hvis omfang på ingen måde står i forhold til de få linier til hver art, findes alle oplysninger nu samlet på ét sted, til gavn for de mange videnskabsmænd for hvem det ofte er en nødvendighed at studere det originale materiale. Foruden fortægnelsen indeholder bogen en kort, men meget nyttig indledning med oplysninger om de samlinger, som Fabricius studerede, og om de samlere, der leverede materiale til ham fra hele jordkloden.

Børge Petersen.