

On the small *Hylastes* species in the Nordic countries and description of a new one, *Hylastes scandinavicus*

By BERTIL LEKANDER

During an excursion in June 1962 to Böda Forest in the northern part of Öland a number of small *Hylastes* was found crawling about on a pile of fresh sawdust, together with *Hylastes brunneus* and *Hylobius abietis*. It was tentatively identified, at the time, as *H. attenuatus* Er. The find was interesting for its own sake since this would have been the first time the species had been found in Öland, having only been reported before from Gotland and Östergötland (Hansen a.o. 1957). A later comparison with a number (10) of *attenuatus* from Middle Europe in the collections of the Royal College of Forestry in Stockholm, showed, however, that there were some distinct morphological differences between the two sets of material. The Öland specimens too shared some common ground with *angustatus* but did not fully agree with this species either.

The following table has been drawn up in order to demonstrate the differences between the Öland collection and the two species mentioned above. I have also taken the opportunity to review the other small *Hylastes* species found in the Nordic countries, viz. *opacus* Er. and *septentrionalis* Egg.

Material

Hylastes opacus Er. 35 specimens from Öland, Södermanland and Östergötland.

— *septentrionalis* Egg. Eggers type specimen from Kalleberga, Sweden, in the collection of the College of Forestry, Stockholm.

— *angustatus* Hbst. 4 specimens from "Gallia", determined by Eggers in the same collections.

— *attenuatus* Er. 7 specimens from Bosnia, 2 from Bavaria and 3 from Moravia. All of these came from the same collection except for two of the last which were kindly placed at my disposal by Dr V. Hansen, Copenhagen, and which were those used in his 1954 investigations.

— *nova spec.* 37 specimens from Öland, 24 kindly lent to me by Dr E. Wirén, Åtvidaberg and Dr H. Eidmann, College of Forestry, and one specimen which I received from Dr A. Bakke, Norway, Vollebakk, making a total of 62 in all.

The differences between these species are as follows: —

	<i>opacus</i> Er.	<i>septentrionalis</i> Egg.	<i>angustatus</i> Hbst.	<i>nova spec.</i>	<i>attenuatus</i> Er.
<i>Length</i> mm	2.7—3.4	2.4	2.5—3.2	2.4—2.9	2.0—2.5
<i>Rostrum</i> Longitudinal furrow	Lacking or very short	indication only	long, distinct (may be ab- sent)	long, distinct	long, distinct
<i>Pronotum</i> Index sides	ca 1.03 evenly rounded	1.03 as <i>opacus</i>	ca 1.08 as <i>opacus</i>	ca 1.08—1.10 broadest before the middle	ca 1.06 evenly rounded somewhat like previous spp.
<i>Punctures</i>	Confluent on the sides of pronotum, punctures big, the big- gest 6-angu- lar, separated by ridges	as <i>opacus</i>	not confluent punctures round, smal- ler than in <i>opacus</i> , sur- faces between the punctures plain micro- reticulate	as in <i>angustatus</i>	as in <i>angustatus</i>
<i>Elytra</i> Index X longer than pronotum	ca 1.75 ca 2.1	1.76 2.2	ca 1.83 ca 1.9	ca 1.81 ca 1.9	ca 1.75 ca 1.9
<i>Bristles</i>	double row the first in- terstices as far as elytral declivity. On the others on the rostral $\frac{1}{4}$ only fig. 2: A	as <i>opacus</i> fig. 2: B	double row on the first 4 interstices at least to the elytral decli- vity fig. 2: C	double row on rostral $\frac{1}{4}$ on the first interstice. On the others only ante- riorally fig. 2: D	single row anteriorly fig. 2: E
<i>Colour of the bristles</i>	Yellow	Yellow	Bright yellow	Bright yellow	White-yellow
<i>Penis</i>	fig. 3: A, B	Notdescribed	fig. 3: C	fig. 3: D	fig. 3: E

It is clear, from the above, that there are two natural groups, one of which includes *opacus*, *septentrionalis* and *angustatus* and the other, *nova spec.* and *attenuatus*.

Hylastes septentrionalis Egg. In 1923 Eggers described this species from material collected by Dr Spessivtseff in Sweden (Kolleberga and Stockholm). Eggers placed this new species as intermediate between *angustatus* and *attenuatus* probably because it is most like them in size and colour. He made no mention of *H. opacus*. In 1933, Eggers stated that *septentrionalis* was synonymous with *plumbeus* Blandf.

In 1954, Hansen reviewed a number of systematists' opinions upon this species, and it is quite evident from this work that the resemblance to *opacus*

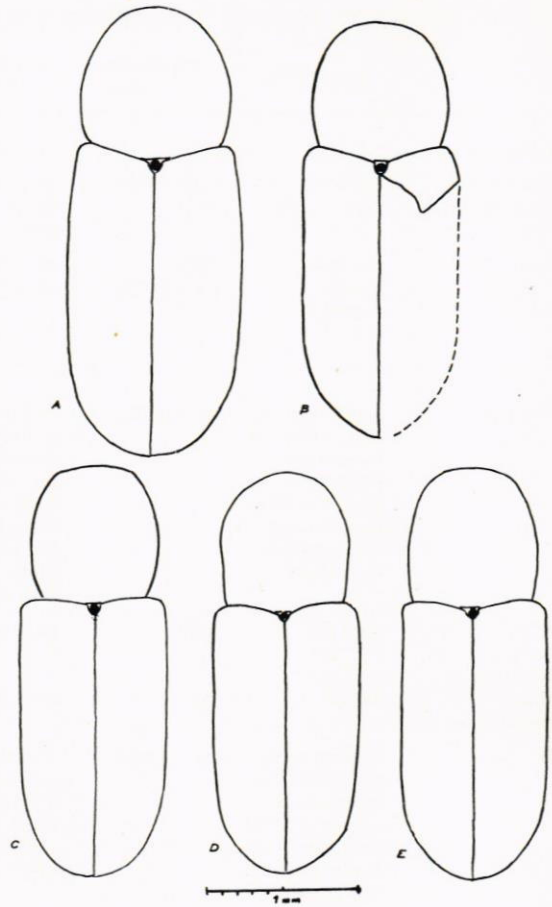


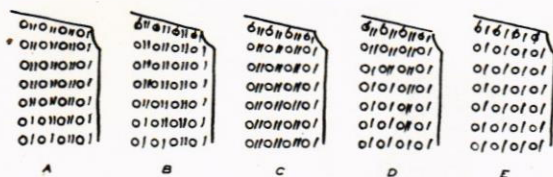
Fig. 1. A: *Hylastes opacus* Er., B: *H. septentrionalis* Egg., C: *H. angustatus* Hbst., D: *H. scandinavicus* n. spec., E: *E. attenuatus* Er.

is very close, and that the two species can only be separated on minor details. For example, Chapuis, in 1875, mentioned that the interstices of *opacus* are distinctly broader than the striae, whilst in *plumbeus* they are narrower. Yet in Eggers type specimen the breadth of the striae and interstices are more or less the same. Stark's 1952 statement only added to the confusion. He said that the striae of *plumbeus* should be deeper than those of *opacus* and that the frons of *opacus* should be more distinctly punctured, and this again is not supported by Egger's type specimen.

As I have had only one specimen of *septentrionalis* (?*plumbeus*) at my disposal — the type specimen — it is not possible for me to say whether or not there are any reliable distinguishing features between this species and *opacus*. I should prefer that the species be not recorded in the Nordic fauna until (a) the synonymy of *septentrionalis* Egg. and *plumbeus* Blandf. has been investigated, and (b) it has been clearly established whether or not *opacus* is a separate species.

Hylastes nova spec. The survey and figures show that this species lies some-
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Fig. 2. The arrangement of the bristles on the basal portion of the left elytra: A: *Hylastes opacus* Er., B: *H. septentrionalis* Egg., C: *H. angustatus* Hbst., D: *H. scandinavicus* n. spec. E: *H. attenuatus* Er.



where between *angustatus* and *attenuatus* in external morphology and the structure of the penis. In my opinion it is an undescribed species and I, therefore, propose the name *scandinavicus* since it is to be found in both Norway and Sweden.

Hylastes scandinavicus nova spec. (fig. 3, 4).

Length 2.6 mm, cylindrical. Head black, light brown at the point of attachment of the antenna. Rostrum distally, on dorsal side, with faint depression without longitudinal keel, medially with longitudinal furrow which becomes a rounded depression posteriorly. Rostrum and frons micro-reticulate, dull, with suggestion of punctures only, and covered with slender, slightly yellowish, bristles. Antenna with 7-jointed funicle and 4-jointed club, light brown with club somewhat darker.

Pronotum $1.09 \times$ longer than broad, dark brown, lighter towards the anterior margin, broadest before middle with evenly rounded anterior border and faintly tapering towards base. Sides with distinct lateral margin forming a sharp borderline between dorsal and ventral sides. Dorsum distinctly punctured; the punctures round and separated from each other at the sides by smooth microreticulate spaces. Anteriorly the punctures closer but separated. Median line long, shiny.

Elytra $1.82 \times$ as long as breadth, $1.9 \times$ longer than pronotum, brown, lighter than pronotum, the anterior margin tuberculate, black. Striae as broad

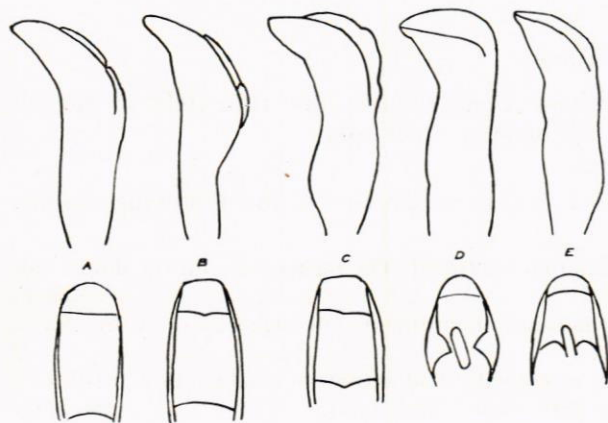
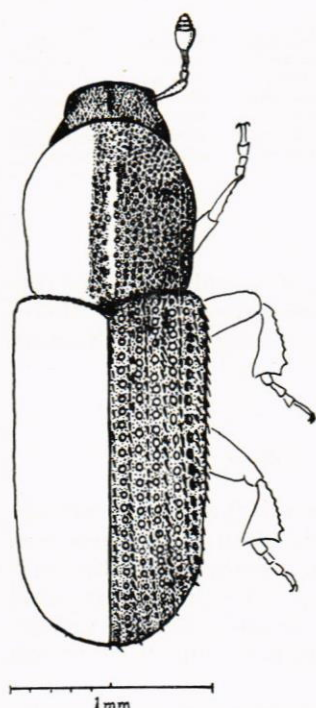


Fig. 3. Lateral and dorsal view of the penis: A, B: *Hylastes opacus* Er., C: *H. angustatus* Hbst., D: *H. scandinavicus* n. spec. E: *H. attenuatus* Fig. A, B, C and E after Hansen, D original.



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4 Fig. 4. *Hylastes scandinavicus* n. spec., female, holotype.
5 Fig. 5. *Hylastes scandinavicus* n. spec. holotype, two striae and tubercles and bristles on the interstices.

as interstices. Interstices smooth, micro-reticulate with small tubercles to the base of which are attached bright yellow bristles. The anterior fifth of first interstice and apex of interstices 2—4, with irregular row of double bristles. Remainder of interstices with single row. Scutellum round, dark brown, irregularly sculptured.

Penis with rounded apex and with the distal part nearly at right angles to the body of the penis.

Larva and development unknown.

Holotype: female, allotype: male, Böda, Öland, June 16th 1962, in the collections of the Royal College of Forestry, Stockholm.

The species mentioned above can be separated by the following characteristics:

1. Punctures on the sides of pronotum confluent. The bigger ones on the dorsal side of pronotum 6-angular *opacus*
- Punctures on the sides of pronotum not confluent. The bigger ones on the dorsal side of pronotum round 2
2. At least some interstices more or less with double rows of bright yellow bristles 3
- On the interstices, single rows with white-yellow bristles *attenuatus*

3. Double row of bristles at least on the first four interstices *angustatus*
 - Double row of bristles on the anterior $\frac{1}{4}$ of the first interstice, on the others on the apex only *scandinavicus*

From the above it may be seen that the following species occur in Fennoscandia: — *opacus* Er. (?*septentrionalis* Egg.); *angustatus* Hbst. and *scandinavicus* n. spec. All so-called *attenuatus* Er. so far found in Scandinavia, on re-examination, have turned out to be *scandinavicus*, and, for this reason, *attenuatus* must be deleted from the Nordic list.

Literature

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