

Notes on the Parasites of Green Spruce Leaf Miner (*Epinotia nanana* Treidsk.) (Hym., Ichneumonidae and Braconidae)

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In 1969 an outbreak of the Green Spruce Leaf Miner (*Epinotia nanana* Treidsk.) was reported from the Province Jämtland, North Sweden. It increased and developed over a large area the following years (1970 and 1971). An estimate of the area indicated that about 49,420 acres were infested in the spring 1971. A study of the parasites proved much of interest. In 1969 only very few specimens of parasites were obtained (ca 2—3 %) but in 1970 the parasites had increased and rearing in the spring 1971 proved that they had reached a level of 50 per cent.

Following species have been obtained:

Ichneumonidae

Phaeogenes suspicax Wesm.
Itopectis lapponicus sp.n.

Braconidae

Apanteles jubmeli sp.n.

In Canada where the Green Spruce Leaf Miner has become important in Quebec the following species of parasites were listed (Daviaut and Ducharme 1966):

Braconidae

Agathis bicolor (Prov.)
Apanteles fumiferanae (Vier.)
Apanteles sp.
Chelonus sp.

Ichneumonidae

Campoplex sp.
Campoplex temporalis (Cush.)
Itopectis sp.
Pimplopterus parvus (Cress.)
Zaleptopygus sp.

Chalcidoidea

Amblymerus verditer (Nort.)
Copidosome deceptor Miller
Dicladocerus sp.
Euderus cushmani (Crawf.)
Habrocytus sp.
Perilampus sp.
Trichogramma minutum Riley

Entomol. Ts. Arg. 93. H. 1-3, 1972

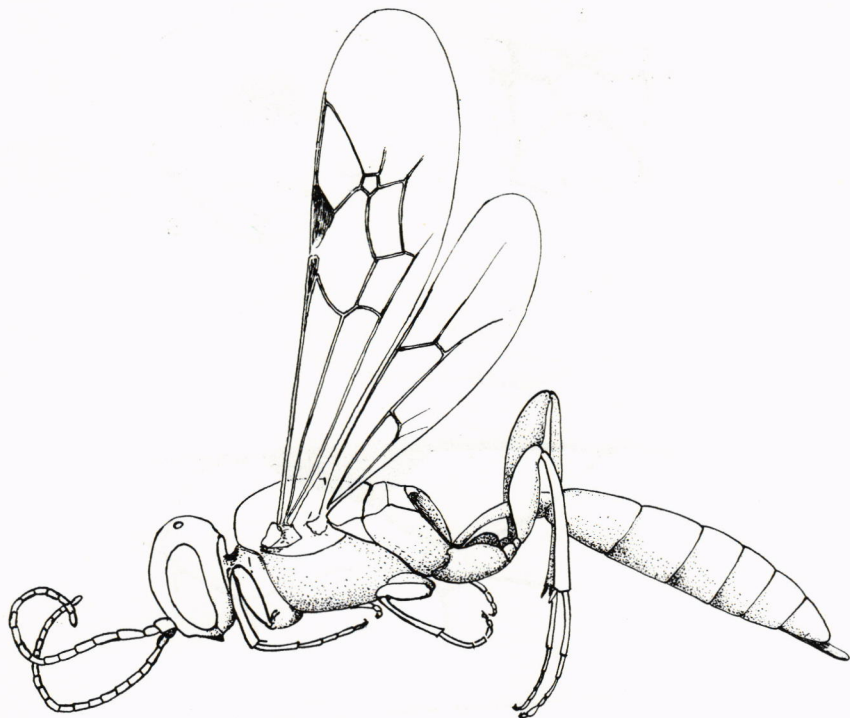


Fig. 1. *Phaeogenes suspicax* Wesm. ♀.

The investigators (DAVIAUT and DUCHARME 1966) found that the per cent of parasites varied from locality to locality. In North Sweden no such variation has been observed.

Description of the parasites

Phaeogenes suspicax Wesm.

Wesmael, 1844. Nouv. mém. acad. sc. Bruxelles. XVIII, 200.

This ichneumonid wasp is not common in Sweden but the host has been unknown. It is an important parasite of *Epinotia nanana* (Treidsk.).

P. suspicax Wesm. (Fig. 1 and fig. 2 A—E) is a black species (♀) with basal part of gaster (2nd—4th tergites) reddish brown. Legs except coxae reddish brown with distal part of mid femur and tibia and hind femur and tibia more and less infuscated. The male with nearly the same colour as the female but gaster darker and legs more reddish brown. Clypeus yellowish brown.

Length: ♀. 3.5—4.0 mm., ♂. 3.7—4.1 mm.

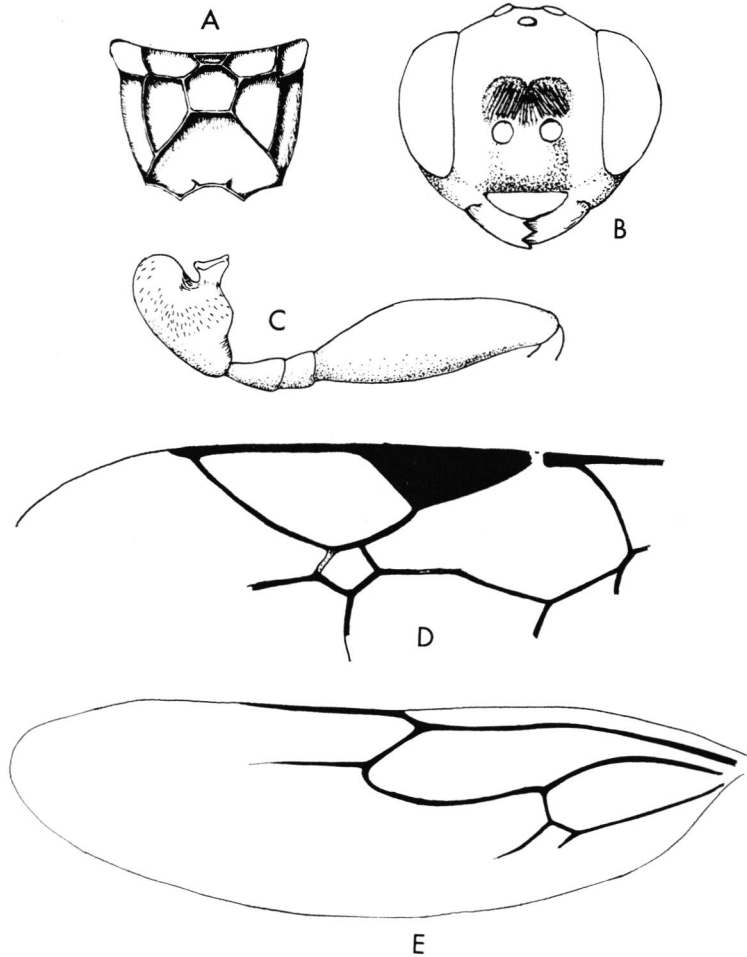


Fig. 2. *Phaeogenes suspicax* Wesm. ♀, A. Propodeum, B. Head in frontal view, C. Part of hind leg (coxa, trochanter and femur), D. Part of fore wing and E. Hind wing.

Itopectis lapponicus sp.n.

♀. Black with palps yellowish white. Legs: fore leg with coxa black, trochanter, femur, tibia and tarsus yellowish white, mid leg with coxa black, basal part of 1st trochanter black rest of trochanter and tibia yellowish white, femur yellowish brown, tarsus with basal part yellowish white and the rest yellowish brown, hind leg with coxa black, 2nd trochanter, a ring in the middle of tibia and base of 1st tarsal joint white — yellowish white, femur yellowish brown darker distally, the rest of tibia and tarsus dark brown. All claws white. Tegula yellowish white. Wings very faintly smoky.

Similar to the female in colour.

Length: ♀. 3.3—3.5 mm., ♂. 3.3—3.5 mm.

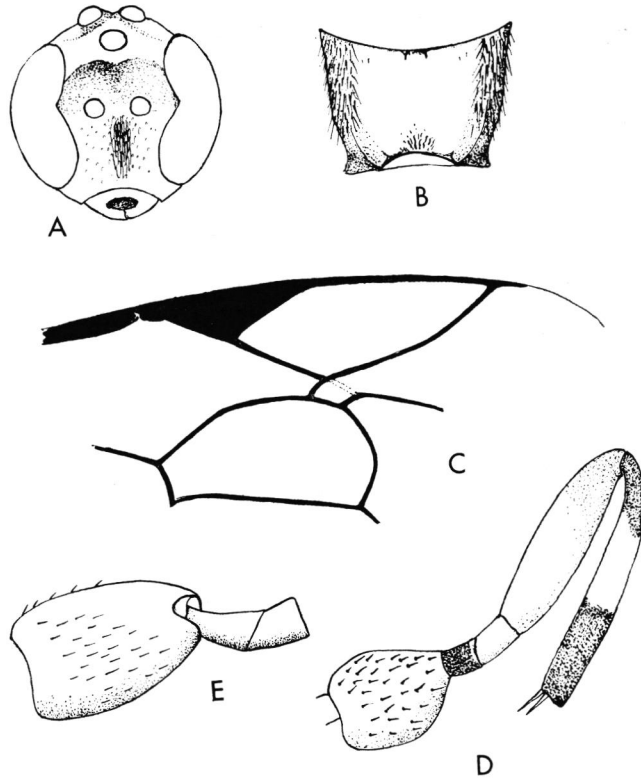


Fig. 3. *Itoplectis lapponicus* sp.n. ♀, A. Head in frontal view, B. Propodeum, C. Part of fore wing, D. Hind leg except tarsus and E. *Itoplectis alternans* (Grav.) ♀, Hind coxa and trochanter.

Holotype: in coll mea, North Sweden, Prov. Jämtland, Ankarvattnet 7/7 1970.

Paratypes: 2 ♀ and 3 ♂. In the same coll as above and from the same locality.

I. lapponicus sp.n. is closely related to *I. alternans* (Grav.) but differs having the hind trochanter in greater part black. The shape of hind coxa differs also (fig. 3 D and E). Propodeum (fig. 3 B) with middle area smooth without longitudinal carinae as in *I. alternans*. Inner orbits diverge less in *I. alternans*. Below toruli (fig. 3 A) an area that is weaker longitudinally, strigose rugose with hairs, in *I. alternans* only punctated with hairs. About fore wing see fig. 3 C.

Apanteles jubmeli sp.n.

♀. Black with all palps and all spurs yellowish white. All femora on both sides with a brownish yellow stripe. Knees and extreme base of tibiae also brownish yellow.

Very fine puncturation on head and thorax. Scutellum with very delicate puncturation. Side of pronotum (fig. 4 D) large, smooth and with two furrows. Propodeum smooth in the middle, on both sides punctures with hairs. 1st and 2nd tergite of gaster, see fig. 4 B. Terebra a little longer than

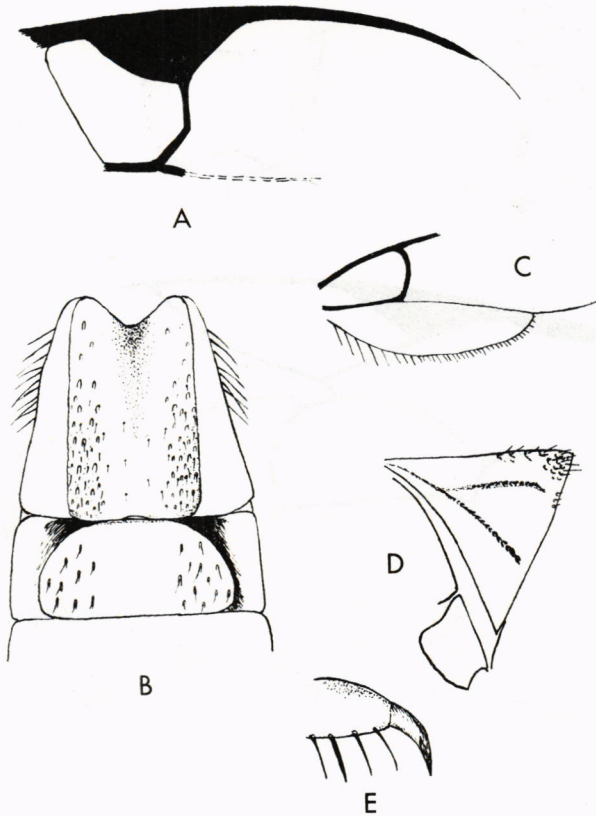


Fig. 4. *Apanteles jubmeli* sp.n. ♀. A. Part of fore wing, B. 1st and 2nd tergites of gaster, C. Basal part of hind wing, D. Side of pronotum and E. Claw.

gaster. Metacarpe (fig. 4 A) long. About the basal part of hind wing, see fig. 4 C. Claws (fig. 4 E) pectinate.

♂. Unknown.

Length: ♀ 2.5—2.6 mm.

Holotype: In coll mea, North Sweden, Prov. Jämtland, Blåsjön, 1/7 1971. Leg. Karl-Johan Hedqvist.

Paratypes: 3 females, in coll mea, Lapland, Tärna, 4/8 1971, leg. Karl-Johan Hedqvist.

A. jubmeli sp.n. is similar to *A. validus* Thoms. but has not the paired projection on anterior margin of postscutellum as in *A. validus*. The shape of 2nd tergite of gaster is different. The colour is also different.

References

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