# The Cnephasia Group of Genera (Tortricidae), with Descriptions of New Taxa

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The group in question has variously been given tribal or even subfamily status (cf. Razowski, 1976). In modern literature the diagnoses of it are rather enigmatic. The first, provided by Obraztsov (1955), does not give any defining character. It is pointed out only in his earlier paper (Obratztsov, 1954), in the key to the tribes of the Tortricinae. It is as follows: "Uncus well developed. Lamina dentata [ = signum] elongate or rounded, rasp like dentate or simple, sometimes in form of chitinous folds; occasionally it is completely lacking or the corpus bursae is for the most part sculptured". These tribal characters were then accepted by some authors or completed with additional features, e.g. by myself (RAZOWSKI, 1959) or Powell (1964) who pointed out the floricomous ovipositor and some bionomic characters as being important systematically. Then I sunk (RAZOWSKI, 1976) Cnephasiini as a junior objective synonym of Archipina finding no separating character (the majority of them, e.g. the floricomous ovipositor, are convergent). However, the group in question shows a common appearence when excluding some genera incorrectly placed in it (e.g. Synochoneura MEYRICK or Palpocrinia Kennel by Obraztsov, 1955, Anopina Obraztsov, 1962 by that author and Powell, 1964, or all Australian genera assigned to it by Common, 1963). Thus I now tried again to select even one autapomorphy characteristic of the "Cnephasiini". The shapes of almost all parts of the genital armatures, venation ad larval characters are either inconstant, variably distributed within the group or certainly convergent. Only one single character could be treated as a probable autapomorphy. That is the presence of the minute spines on the uncus. However, these are absent in Cnephasia incertana Treitschke and in some examined specimens of *Xerocnephasia rigana* (Sodoffsky).

The generic characters are also insufficiently studied. In the Palaearctic Subregion there are 11 genera (arranged here alphabetically): Amphicoecia Razowski, Cnephasia Curtis, Doloploca Hübner, Eana Billberg, Epicnephasia Danilevsky, Euledereria Fernald, Exapate Hübner, Kawabea Obraztsov, Neosphaleroptera Réal, Oxapteron Staudinger and

Tortricodes Guenée. One further genus is known only from the Nearctic Subregion: Decodes Obraztsov (I have some doubts as concerns Acroplectis Meyrick). Two genera, Cnephasia and Eana, are Holarctic in distribution. No phylogenetic relationships among them can be found at present, moreover, in some cases even the autapomorphies have not been discovered. Some genera, however, have developed a spined area on the dorsal surface of the transtilla and that is the only probable synapomorphy. Another distinct character, the shape of the uncus, is inconstant not only within the above group with spines on transtilla (Eana – Decodes), but also within one genus (Cnephasia). The above mentioned spined transtilla is treated as the progressive character and has been found in all representatives of the following genera: Decodes, Doloploca, Eana, Epicnephasia, Exapate and Xerocnephasia.

The following autapomorphies have been found in the individual genera to date. Other characters, mainly convergent within the family and synapomorphies, are given in brackets.

Amphicoecia: End of sacculus minutely spined, broadening apically.

Cnephasia: End of sacculus with a brush composed of short bristles or spines in the majority of species, or no free end of sacculus present, transtilla usually band-shaped, partially membranous, occasionally with ventral sculpture; often small sclerites on vesica wall.

Decodes: ? Terminal portion of sacculus folded in majority of species. (Base of valval costa thick; uncus slender; transtilla spined).

Doloploca: Lateral corners of base of uncus expanding distally. (End of sacculus with ventral plates; antrum bulbous; transtilla spined).

Eana: End of sacculus smooth, sharp, directed ventrally or distally. (Central part of transtilla helmet-shaped, spined dorsally, its lateral portions slender).

*Epicnephasia*: Uncus broad with indistinct, not spined, bases. (Median, spined part of transtilla slender. Caulis delicate; lateral parts of gnathos broadening subterminally; sacculus without free end; female micropterigous).

Euledereria: Transtilla arch-shaped, simple; thin, long sclerite extending from aedeagus. (Gnathos band-shaped; sacculus with two terminal processes; antrum tubular). Female stenopterigous.

Exapate: ? Distal, slender part of uncus not spined. (Arm of gnathos minutely spined; spined area of transtilla long, slender; female micropterigous).

*Kawabea* : – (Aedeagus bifurcate ; caulis strong ; uncus slender ; transtilla simple, band-shaped).

Oxypteron: ? Elongate sclerite of the vesica wall. (Base of uncus slightly

broadening; gnathos absent; transtilla weak, band-shaped; caulis strong, well attached to juxta).

Neosphaleroptera: — (Uncus spined but with smooth base; sacculus provided with terminal processes; aedeagus dentate laterally; caulis weak).

Tortricodes: Base of costa of valva curved upwards, fused with lateral vestiges of transtilla. (Aedeagus with two processes; sacculus strong, with internal fold).

### Description of new taxa

Archicnephasia gen. nov.

Type-species: Archicnephasia hartigi sp. nov.

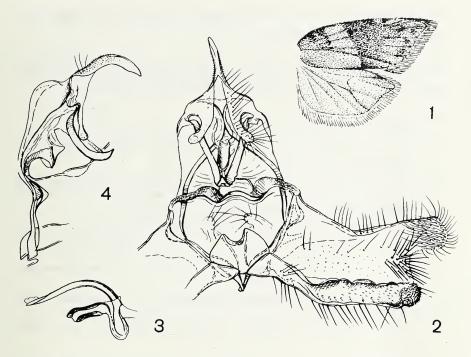
Labial palpus 1.5; all veins of forewing separate, the two last radial veins converge at median cell, the last to termen just beyond apex; in the hindwing rr stalked with  $m_1$  to 1/3, and  $m_3$  with  $cu_1$  to middle.

Male genitalia: tegumen broad with rather slender pedunculus; uncus slender, minutely spined with base not expanding, spined only dorsally; gnathos arm strong, terminating in subtriangular plate; subscaphium long, concave medially; vinculum slender. Transtilla with rather weakly sclerotized lateral portions and distinctly sclerotized median area forming a fold accompanied by dorso-median membranous convexity directed distally. Costa of valva distinct; internal surface of sacculus concave in distal half, terminal portion spined.

Comments. The new genus is allied to *Cnephasia*. Its probable autapomorphies are the grooved sacculus, doubly curved transtilla, stout spined termination of sacculus and strong caulis strengthened with ventral and dorsal extensions of the lateral edges. The genus is monotypical.

Archicnephasia hartigi sp. nov.

Alar expanse, 24 mm. Labial palpus brownish, upper part of head with scattered cream-brown scales; thorax brownish. Forewings broad (fig. 1) with costa curved outwards especially to middle; apex rather short; termen fairly oblique, hardly concave postapically. Ground colour dirty cream, strongly suffused with brownish; pattern diffuse, brown, consisting of ill-defined basal blotch, broad median fascia and weak subterminal markings. Fringes darker than ground colour with vestige of median line. Hindwings broad, whitish brown, weakly darkening on peripheries; fringes rather concolorous.



Figs. 1-4. Archicnephasia hartigi sp. nov. : 1 - wings ; 2-4 - male genitalia

Male genitalia (figs. 2-4): Socius scarcely hairy; juxta moderate with apical incisure strengthened by slender fold. Valva bristled and hairy (in distal portion); aedeagus very slender, simple; caulis in basal portion weakly sclerotized. Otherwise as described for the genus.

Bionomy: Moth flies in late autumn.

Holotype, male: "Lucania, Mte Vulture dint. Laghi di Monticchio, m. 750, 9.11.1961, coll. Hartig", G. Sl. 10019, in the collection Hartig.

Comments. The new species resembles externally some species of Acleris HÜBNER. I am dedicating it to its collector Prof. Dr. Fred HARTIG of Bolzano acknowledging the material of Italian Cnephasia obtained for determination.

## Systematic changes within the group

Amphicoecia adamana (Kennel, 1919), comb. nov. Described in Tortricodes, was then placed (Razowski, 1965) in Oporopsamma Gozmány.

Transferable to *Amphicoecia* on the basis of comparisons with the typespecies. *A. strennua* Razowski.

Oxypteron wertheimsteini (Rebel, 1913) was originally described in Cnephasia, then placed in Oxypteron, but finally selected for the typespecies of Oporopsamma Gozmány. Transferable to Oxypteron.

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