



BOR-20177100

AGL

NAL STACKS -- QL1.M87

TALITHA PRICE
APHIS
USDA/APHIS SUITE 400
1730 VARSITY DR
RALEIGH, NC 27606-2194

ATTN:	SUBMITTED:	2009-09-09 08:18:46
PHONE: (919) 855-7457	PRINTED:	2009-09-11 14:58:10
FAX:	REQUEST NO.:	BOR-20177100
E-MAIL:	SENT VIA:	World Wide Web
	PATRON TYPE:	USDA

BOR RegularNEED BEFORE: 2009-09-30

TITLE: MISCELLANIA ZOOL.
VOLUME/ISSUE/PAGES: 20:1 125-130
DATE: 1997
AUTHOR OF ARTICLE: Razowski, J
TITLE OF ARTICLE: GENERIC COMPOSITION OF THE NEW WORLD ARCHIPINI
(LEPIDOPTERA, TORTRICIDAE) WITH DESCRIPTION OF
TWO NEW GENERA AND TWO NEW

DELIVERY: E-mail Post to Web: talitha.price@aphis.usda.gov
REPLY: E-mail: talitha.price@aphis.usda.gov

This document contains 6 pages. This is NOT an invoice.
Collection Services Branch, National Agricultural Library
301-504-5717 access@nal.usda.gov

ANY MATERIAL SUPPLIED MAY BE PROTECTED BY COPYRIGHT LAW (TITLE 17, USC)

Generic composition of the New World Archipini (Lepidoptera, Tortricidae) with description of two new genera and two new species

J. Razowski

Razowski, J., 1997. Generic composition of the New World Archipini (Lepidoptera, Tortricidae) with description of two new genera and two new species. *Misc. Zool.*, 20.1: 125-130.

Generic composition of the New World Archipini (Lepidoptera, Tortricidae) with description of two new genera and two new species.— The geographic distribution of the genera of Archipini from the New World is discussed and compared with that of other regions. The 11 genera found in the Nearctic subregion are all known from the Palaearctic subregion. In the Neotropical region there are six genera only, three being endemic. Two genera, viz., *Tacertaenia* with *T. polonorum* and *Sychnovalva* with *S. syrrhapta* are described as new.

Key words: Lepidoptera, Tortricidae, Archipini, New World.

(Rebut: 24 V 96; Acceptació condicional: 16 XI 96; Acc. definitiva: 28 I 97)

J. Razowski, *Inst. of Systematics and Evolution of Animals, Polish Academy of Sciences, 31-016 Kraków, Sławkowska 17, Poland.*

Introduction

The generic composition of the tortricid tribes of the New World has not been discussed previously. Moreover, data on the Neotropical faunas are still very incomplete.

The tribe Archipini has a world-wide distribution and the majority of genera and species occur in the Oriental region and the Palaearctic subregion. In the Palaearctic

subregion which is the best studied area, 25 genera occur of which 12 are shared with the Oriental region.

The aim of this work is to present a preliminary summary of the generic composition of the tribe Archipini in the New World. Although a comparison with that of other tribes is at present impossible, it is clear that the Archipini are poorly represented in the Neotropical region.

Material and methods

The present data are based on the material deposited in the largest entomological institutions, which are mainly American, and in some private collections.

Distribution of the genera of Archipini in the New World

The Archipini are represented by only 15 genera in the New World. Only nine genera are recorded from the Nearctic subregion.

Cudonigera Obratzov & Powell, 1977 is endemic in this area. This monotypical genus is very close to *Choristoneura* Hübner, 1825 differing only in one character of the female genitalia.

Two genera, viz., *Batodes* Guenée, 1845 and probably *Cacoecimorpha* Obratzov, 1954 were artificially introduced into North America.

Four genera (*Archips* Hübner, 1825, *Pandemis* Hübner, 1825, *Adoxophyes* Meyrick, 1881 and *Clepsis* Guenée, 1845) are widely distributed in the Palaearctic subregion and the Oriental region. The distribution of *Adoxophyes* is even wider as there are several species in the Australian region and in North America there are two species distributed in its northern parts.

The genera *Syndemis* Hübner, 1825 and *Aphelia* Hübner, 1825 are Holarctic in distribution; the former is represented in the Palaearctic subregion by a single species, and the latter by numerous species and all subgenera. The Nearctic species of *Aphelia* Hübner belong to two subgenera; one species is included in *Zolotheres* Lederer, 1859 four in *Aphelia* s. str. They are widely distributed throughout North America from Alaska and Quebec to Texas.

Archips Hübner is known from all of Asia and in North America is represented by 21 species distributed mainly in the northern and central parts of the subregion but reaching southwards as far as California, Texas and Florida.

Choristoneura has a similar distribution but does not penetrate into the Oriental region. Seventeen species occur in North America and are known mainly from the northern and central parts of the sub-

region, not expanding far south (except for one widely distributed species recorded in the south from California and Florida, and central Mexico).

The genus *Pandemis* is abundant in species in temperate and tropical Asia as well as in the Afrotropical region where it occurs in Madagascar and South Africa. The Nearctic species reaches as far south as California.

Two genera, *Argyrotaenia*, Stepyhens, 1852 and *Clepsis*, occur over a wide area of the New World, the former from northern Canada to Argentina and the latter to Peru. *Argyrotaenia* is represented in the Holarctic region by a single very widely distributed Palaearctic species and by over 35 Nearctic species. A similar number of species occurs in the Neotropical region. There are only slight differences between the species and only a few South American species are better differentiated, particularly concerning the genitalia. The number of species of *Clepsis* increases slightly from Canada to Mexico, and in South America the genus is represented by five species in Peru, Venezuela and Guatemala and five other species in Colombia. On basis of unexamined material the author assumes that this genus is more abundant in species, specially in the mountains of Peru and Colombia. Three of the species closely related with *C. smicrotes* (Walsingham, 1914) occur in Canada and 14 in Mexico. All Central American and South American species belong to this group. Several species described or placed in *Smicrotes* Clemens, 1860 have been incorrectly included in *Ptycholoma* Stephens, 1829 which is exclusively a Palaearctic genus. Of the remaining species of *Clepsis* one is of Holarctic distribution, and six are Nearctic, all occurring in the northern and central areas of North America and more southwards in the mountains (e.g. in California).

Another Nearctic genus, *Durangarchips* Powell, 1991 is monotypical and known only from Durango (Mexico).

In the Neotropical region, apart from the last two genera, occurs *Idolatteria* Walsingham, 1913 with eight species distributed between Guatemala and Bolivia and two genera described below, all most prob-

outh (except for
cies recorded in
and Florida, and

abundant in spe-
ical Asia as well
ion where it oc-
outh Africa. The
far south as Cali-

nia, Stepyhens,
ver a wide area
mer from north-
and the latter to
represented in the
gle very widely
cies and by over
milar number of
tropical region.

erences between
w South Ameri-
ferentiated, par-
genitalia. The
Clepsis increases
Mexico, and in
s is represented
Venezuela and
er species in Co-
amined material
his genus is more
ally in the moun-

ia. Three of the
with *C. smicrotes*
r in Canada and
al American and
belong to this
scribed or placed
1860 have been
Ptycholoma Ste-
ively a Palaearctic
species of *Clepsis*
tribution, and six
g in the northern
rth America and
mountains (e.g.

s, *Durangarchips*
ical and known
co).

gion, apart from
s *Idolatteria* Wal-
t species distrib-
a and Bolivia and
ow, all most prob-

ably endemic in this region. They are de-
scribed from Southern Brazil, but their range
may be much larger.

As it has not been possible to examine
any specimens of *Nesochoris* Clarke, 1965
the systematic position of this genus can-
not yet be discussed.

The tribe Archipini, seems to be repre-
sented in the New World by a rather small
number of the genera and species. Some
endemic small genera may yet be discov-
ered in very little studied territories, spe-
cially in the mountains of the western part
of the Neotropical region. Many new spe-
cies may be added to *Argyrotaenia* and
Clepsis. More comprehensive collecting may
add many taxa as it did, for instance, in
Mexico.

Descriptions of new taxa

Tacertaenia n. gen.

Type-species: *Tacertaenia polonorum* n. sp.

Externally similar to the representatives
of *Argyrotaenia* Stephens. Venation and
sexual dimorphism as in the mentioned
genus.

Male genitalia (figs 1-3)

Tegumen very broad, with small, narrow
ends of pedunculi; uncus very large, bifid
postmedially, with rounded apical parts;
socius small, membranous, hairy; gnathos
arms broad, with terminal parts plate-
shaped, apically rounded, connected with
one another by means of broad membrane,
without medial plate; vinculum small, as in
Argyrotaenia; valva elongate, with dorso-
terminal part expanding slightly dorsally,
more strongly sclerotized than the remain-
ing costal area, sacculus as long as valva,
angulate at its end, extending dorsally
along its caudal edge, provided with minute
free termination, fold distinct, pulvinus ill-
defined; transtilla band-shaped, broaden-
ing slightly basally; juxta ovate; aedeagus
slender, curved, with short coecum penis,
cornuti missing.

Female genitalia (fig. 4)

Eighth tergite and papilla analis large, slen-

der, apophyses moderate; sterigma rather
broad in median part, with slender lateral
arms well sclerotized along anterior edges,
ostium bursae very small; colliculum small,
membranous; ductus bursae rather short
with ductus seminalis extending post-medi-
ally; signum absent.

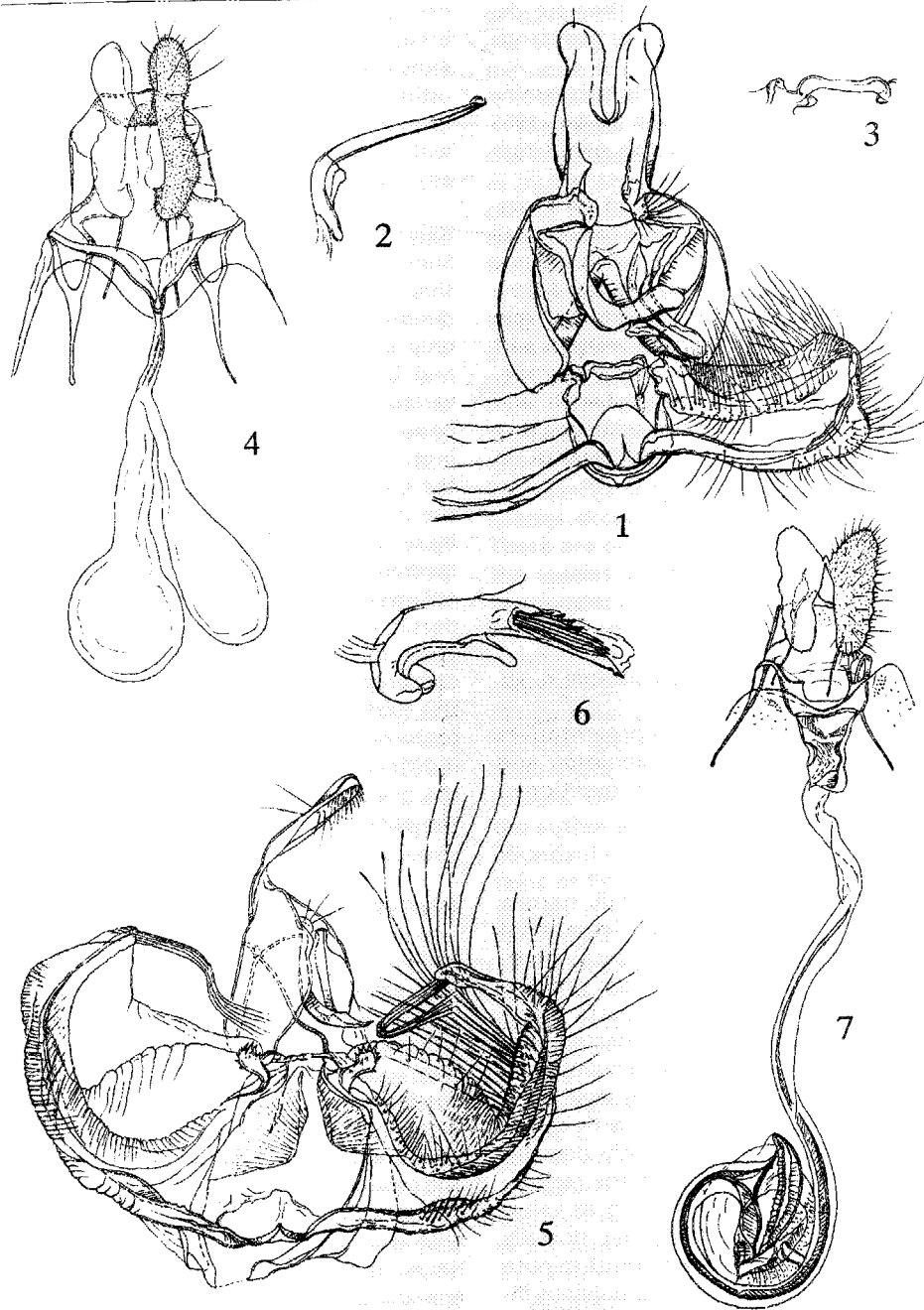
Remarks

Supposedly closest to *Argyrotaenia* as the
shape of forewings, coloration and sexual
dimorphism show. The genitalia are similar
only in the shape of transtilla, aedeagus
and bursa copulatrix which, however, is
variable in *Argyrotaenia* (the sclerite of the
basal part of ductus bursae is often miss-
ing). The supposed autapomorphies are
the broad, rounded apically distal parts of
the uncus, the arms of gnathos connected
by means of a membrane, the atrophy of
median, terminal part of the gnathos, the
enlarged, somewhat stronger sclerotized
dorsal termination of the valva. The ab-
sence of the cornuti and the signum are
convergent reductions often observed in
this subfamily. The new genus is also close
to the new genus described below although
it differs in the absence of median plate of
the gnathos and its lateral processes, and
the absence of the signum.

Tacertaenia polonorum n. sp.

Male

Alar expanse 13-15 mm; labial palpus as
long as diameter of eye, ferruginous to rust
yellowish, head, thorax and forewing pat-
tern concolorous; the latter consisting of
dorso-basal suffusion, median fascia inter-
rupted subcostally and subtriangular, large
subapical blotch; ground-colour much paler
and creamer, sprinkled rust; fringes in tornal
half concolorous with ground-colour, other-
wise with pattern. Hindwing dirty cream,
tinged grey in anal area, with yellow in
remaining periphery; fringes concolourous
with adjacent parts of wing. Variation: pat-
tern occasionally brown-grey, more or less
distinct, ground-colour at dorsum pale. Fe-
male (17-19 mm) almost unicolorous rust, or
with weak darker pattern before apex and
tornus; hindwing orange-ferruginous, paler
basally, brown-grey in anal area.

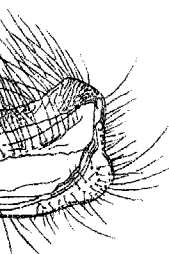


Figs. 1-7. Male and female genitalia. 1-4. *Tacertaenia polonorum* n. sp.: 1-3. ♂ paratype.; 4. ♀ paratype. 5-7. *Sychnovalva syrrhapta* n. sp.: 5,6. ♂ holotype; 7. ♀ paratype.

Genitalia del macho y de la hembra. 1-4. *Tacertaenia polonorum* sp. n.: 1-3. ♂ paratipo; 4. ♀ paratipo. 5-7. *Sychnovalva syrrhapta* sp. n.: 5,6. ♂ holotipo; 7. ♀ paratipo.



3



7

3. ♂ paratype;
paratype.

sp. n.: 1-3. ♂
; 7. ♀ paratipo.

Genitalia

As described for the genus.

Material studied

Holotype, 'Brazylia, Santa Catarina, Rio Vermelho, 968 m, 21.II.1973, A. & J. Razowski'; coll. V.O. Becker, Planaltina, Brazil. Paratypes: 37 males and 17 females from type-locality, dated 19-22 II 1973 and 6 III 1973, Rio Negro, Paraná, 900 m., 9 II 1973 and 14 km NW Sao Bento do Sul, 850 m, 1 and 23 II 1973.

Note

This species is described in honour of the Polish speaking inhabitants of the villages in Paraná and Santa Catarina, descendants of the Polish immigrants, who helped me so much in collecting the moths.

Sychnovalva n. gen.

Type-species *Sychnovalva syrrhapta* n. sp.

Forewing rather broad; costal fold very slender reaching beyond mid-costa; apex very short; termen straight beyond apex.

Male genitalia (figs 5,6)

Tegumen small; uncus long, provided with ventral brush; socius very small, membranous; gnathos arms slender, terminal plate small; valva large with membranous disc, fold large; a pencil of long hair at dorso-apical part of valva; sacculus without free termination; base of transtilla with curved, dentate apical lobe from middle of which a submembranous process extends; aedeagus slender with coecum penis curved proximally and caulis long; several cornuti in vesica.

Female genitalia (fig. 7)

Papilla analis small; apophyses very slender; sterigma arms small, broad basally; colliculum large, rather membranous with submedian sclerite and anterior lobe; cestum reaching 2/3 of length of ductus bursae, broadening in corpus bursae; this latter minutely spined; signum absent.

Remarks

This genus resembles some Oriental repre-

sentatives of Archipini (e.g. *Isodemis* Diakonoff, 1952, *Homona* Walker, 1853) in having large, membranous folds of the valva. However, it differs from them in the transtilla which suggests its affinity to the group of genera allied with *Clepsis*. The supposed autapomorphies of this genus are the curved base of the transtilla with its proximal process and the pencil hair of the dorsal end of the valva.

Genitalia

As described for the genus.

Distribution

Brazil: Santa Catarina, Paraná.

Sychnovalva syrrhapta n. sp.

Alar expanse 15 mm; labial palpus longer than diameter of eye; head and tegula greyish white; costal part of termen not oblique. Ground-colour yellowish ochreous, strigulated and sprinkled brownish; remainders of median fascia and subapical blotch brownish; terminal area of wing veins suffused brownish; fringes brownish cream. Hindwing cream, suffused brownish yellow on periphery, fringes similar.

Genitalia

As described above.

Material studied

Holotype, male: 'Brazylia, Santa Catarina, Rio Vermelho, 968 m, 26 II 1973, A. & J. Razowski'; coll. V. O. Becker, Planaltina, Brasil. Paratype, female similarly labelled but dated 20 II 1973.

Acknowledgements

The author is grateful to two anonymous reviewers mainly for the linguistic corrections.

Resumen

Composición genérica de los Archipini del Nuevo Mundo (Lepidoptera, Tortricidae) con descripción de cuatro nuevos géneros y dos nuevas especies

Se discute y compara la distribución geográfica de los géneros Archipini del Nuevo Mundo con los de otras regiones. Los 11 géneros encontrados en la subregión Neártica son conocidos de la

subregión Paleártica. En la región Neotropical sólo hay seis géneros, tres de ellos endémicos. Se describen dos nuevos géneros, viz. *Tacertaenia* con *T. polonorum* y *Sychonavalva* con *S. syrrhapta*.

M
R
E
O
V
S
J
R
L
R
t
s
E
f
o
K
(R
J
K
i
A
t
b
t
t
s
IS