

### III. Review of the Genus *Desumenopon* (Mallophaga: Menoponidae) With Descriptions of Three New Forms

In 1950, I reviewed the New World species of *Amyrsidea* Ewing, with emphasis on the species parasitic on the avian family Cracidae and the genus *Odontophorus* (Phasianidae). I had previously reviewed the genus *Menacanthus* in 1946.

This classification was followed at the suggestion of Dr. Hopkins. It was against my wishes at the time, and I expressed my doubts in the introduction of the 1950 paper. Up to that time I had not seen specimens of *Menopon ventralis* Nitzsch, the type species of *Amyrsidea*; but in 1954, a pair of *M. ventralis* was secured. At once it was evident that all the species I had described as *Amyrsidea* were not congeneric with *M. ventralis* and that in reality two very distinct genera were represented in my material; those from the avian family Cracidae represented one genus, and those from the avian genus *Odontophorus*, the other.

The group from the Cracidae I later called *Cracimenopon*. The group from *Odontophorus* I called *Desumenopon*, the genus I now wish to review. The correctness of this classification was confirmed by Hopkins and Clay in 1955.

*Cracimenopon* is not conspecific with *Amyrsidea*, although its affinities perhaps lie in that direction. On the other hand *Desumenopon* is very closely related to *Menacanthus*, the only outstanding difference between the two being the absence of ventral headspines in *Desumenopon*. In the paper describing *Cracimenopon* and *Desumenopon* full generic descriptions were given, *Amyrsidea* was clearly redefined, and the differences between it and them were given; hence, remarks regarding their characterization are not repeated here.

In my 1950 paper, three closely related forms from the avian genus *Odontophorus* were described (*Amyrsidea praegracilis*, *A. p. gujanensis*, and *A. p. cumbrensis*), and a fourth species, *Desumenopon hyperythrus*, was also described at that time. Material from three additional species of *Odontophorus*, one from Colombia, one from Ecuador, and one from Peru has now been studied and found to be typical *Desumenopon*. In this review of all the known forms, consequently, it has been necessary to revise somewhat the original classification.

Like so many genera of the Menoponidae, the differences between species and subspecies are often not prominent, so that the sum of various small differences must be very carefully considered, such as size and shape of head and size and shape of male genitalia, especially the movable

sclerite. There are no apparent differences in the chaetotaxy of the head, thorax, or abdomen, other than length of setae in some cases.

Unfortunately two of the new forms described below are each represented by a single male specimen.

**Genus *Desumenopon* Carriker**

*Amyrsidea* (part) Carriker, 1950, Rev. Acad. Colombiana Cienc., vol. 12, p. 490.  
*Desumenopon* Carriker, 1954, Nov. Colombianas, vol. 1, p. 25.—Type species: *Amyrsidea praegracilis* Carriker.

KEY TO THE MALES OF DESUMENOPON

- 1. Frons uniformly circular . . . . . 2  
    Frons not as above . . . . . 3
- 2. Prothorax large (0.23×0.37 mm.); head wide at temples (0.43);  
    parameres much thickened basally; movable sclerite as in fig. 1.

**D. praegracilis**

Prothorax and head much smaller (head width at temples 0.384; prothorax, 0.17×0.34; parameres uniformly slender; sclerite as in fig. 19 . . . . . **D. speciosa**

- 3. Sides of genitalia deeply concave at bases of parameres, which are sharply recurved; occipital margin only slightly concave; prothorax long (0.18) . . . . . **D. hyperythrus complicatus**

Sides of genitalia not deeply concave . . . . . 4

- 4. Carinae of endomerale sac as in fig. 12; head very narrow at frons and temples (frons, 0.29; temples, 0.35) . . **D. hyperythrus hyperythrus**
- Carinae of sac as in fig. 21; head wide and of distinct shape (frons, 0.30; temples, 0.385) . . . . . **D. hyperythrus ricaurtei**

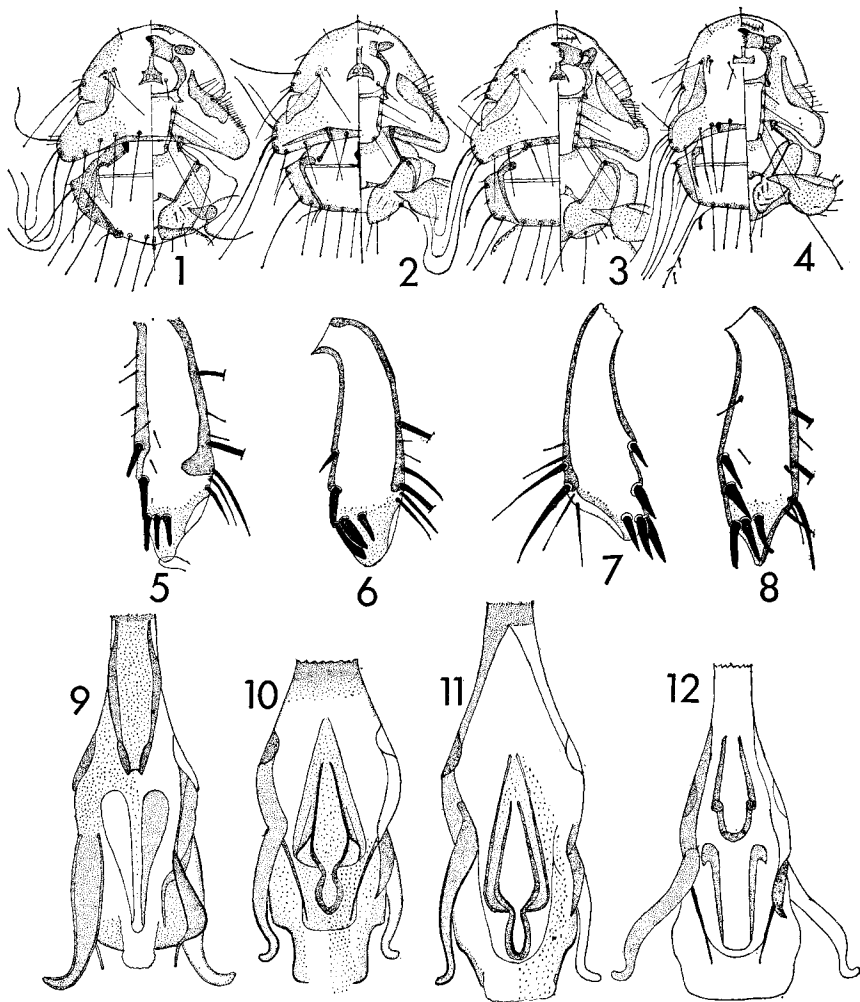
- 5. Sides of frons almost straight, back of flatly rounded tip; occipital transverse carina marginal; prothorax length, 0.18.

**D. gujanensis gujanensis**

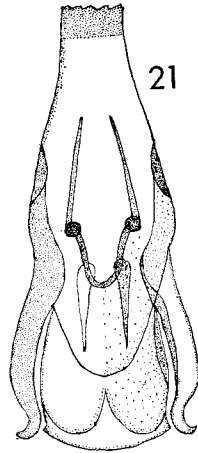
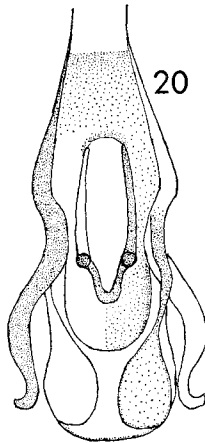
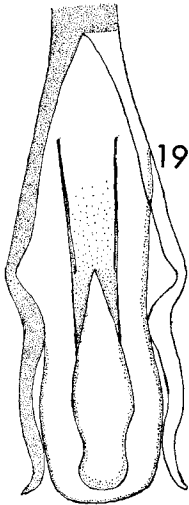
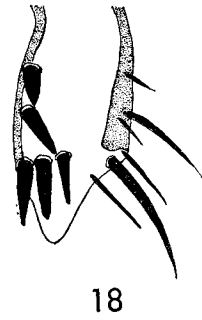
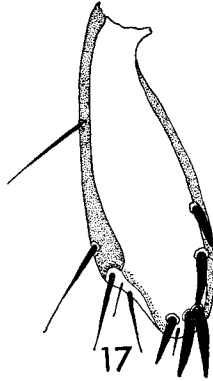
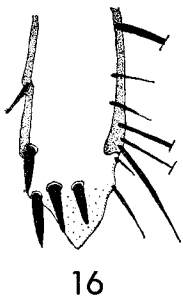
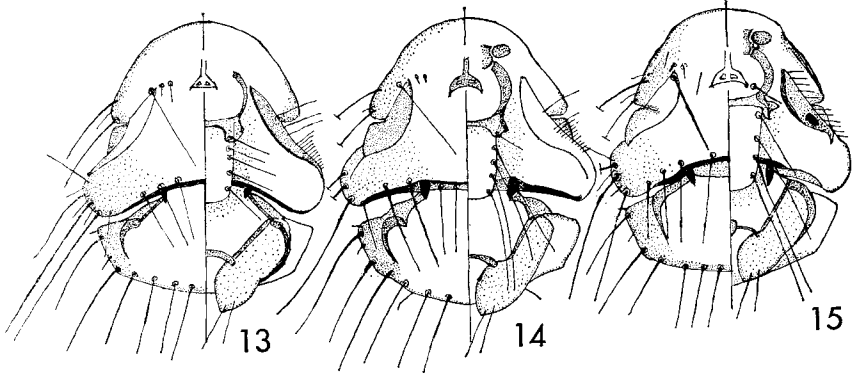
Sides of frons strongly convex; occipital carina deeply submarginal; prothorax, 0.165 . . . . . **D. gujanensis cumbrensis**

MEASUREMENTS OF MALES OF DESUMENOPON

	head at temples	frons	head at occiput	prothorax	pterothorax	body
praegracilis	.326×.44	.335	.282	.17 × .39	.217×.445	1.88
g. gujanensis	.303×.412	.326	.282	.195×.355	.195×.50	1.71
g. cumbrensis	.314×.415	.33	.28	.195×.37	.195×.50	1.74
h. hyperythrus	.315×.37	.27	.27	.206×.337	.203×.434	1.72
h. ricaurtei	.314×.40	.326	.26	.185×.36	.185×.434	1.66
h. complicatus	.303×.40	.303	.250	.18 × .35	.17 × .44	1.58
speciosa	.303×.40	.31	.26	.174×.347	.17 × .452	1.70



FIGURES III:1-21.—Males of *Desumenopon*: 1-4, Head and prothorax: 1, *D. praegracilis* (Carriker); 2, *D. gujanensis cumbrensis* (Carriker); 3, *D. gujanensis gujanensis* (Carriker); 4, *D. hyperythrus hyperythrus* Carriker. 5-8, Third tibia: 5, *D. praegracilis* (Carriker); 6, *D. gujanensis cumbrensis* (Carriker); 7, *D. gujanensis gujanensis* (Carriker); 8, *D. hyperythrus hyperythrus* Carriker. 9-12, Genitalia: 9, *D. praegracilis* (Carriker); 10, *D. gujanensis cumbrensis* (Carriker); 11, *D. gujanensis gujanensis* (Carriker); 12, *D. hyperythrus hyperythrus* Carriker. 13-15, Head and thorax: 13, *D. speciosa*, new species; 14, *D. hyperythrus complicatus*, new subspecies; 15, *D. h. ricaurtei*, new subspecies. 16-18, Third tibia: 16, *D. speciosa*, new species; 17, *D. hyperythrus complicatus*, new subspecies; 18, *D. h. ricaurtei*, new subspecies. 19-21, Genitalia: 19, *D. speciosa*, new species; 20, *D. h. complicatus*, new subspecies; 21, *D. h. ricaurtei*, new subspecies.



There is a slight difference among species in the spines at the tip of tibia 3 in size and position, especially in first spine above the three terminal ones and in the second above the three.

Spines on tibia 2 are similar in number to those on tibia 3, but the upper two singles are shorter and thicker in the second tibia.

The tibial spines may possibly be useful in separating species or subspecies, but a much larger number of specimens would be necessary for study.

It is worthy of note that the tibial spines in *Desumenopon* are very similar to those of the species of *Menacanthus*, parasitic on the Woodpeckers (Picidae).

*Desumenopon praegracilis* (Carriker)

FIGURES III:1,5,9

*Amyrsidea praegracilis praegracilis* Carriker, 1950, Rev. Acad. Colombiana Cienc., vol. 7, p. 507, figs. 62-65. Host: *Odontophorus gujanensis polionotus* Osgood and Conover.

The original publication gives a full description and several figures. This paper gives additional figures and more complete measurements.

*Desumenopon gujanensis gujanensis* (Carriker)

FIGURES III:3,7,11

*Amyrsidea praegracilis gujanensis* Carriker, 1950, Rev. Acad. Colombiana Cienc., vol. 7, p. 509, figs. 66-68. Host: *Odontophorus g. gujanensis* (Gmelin).

Described and figured in original publication, but additional figures and measurements are presented in this paper.

*Desumenopon gujanensis cumbrensis* (Carriker)

FIGURES III:2,6,10

*Amyrsidea praegracilis cumbrensis* Carriker, 1950, Rev. Acad. Colombiana Cienc., vol. 7, p. 509, figs. 69, 70. Host: *Odontophorus columbianus* (Gould).

Additional details are given in the key to species, figures, and table of measurements.

*Desumenopon hyperythrus hyperythrus* (Carriker)

FIGURES III:4,8,12

*Desumenopon hyperythrus* Carriker, 1954, Nov. Colombianas, vol. 1, p. 5, pl. I, fig. 5, pl. II, figs. 2-6. Host: *Odontophorus hyperythrus* Gould.

The above cited publication gives a full description of the genus and for *Cracimenopon*. Additional details are given in the key to species, figures, and table of measurements.

*Desumenopon hyperythrus ricaurtei*, new subspecies

FIGURES III:15,18,21

Holotype male from *Odontophorus erythrurus parambae* Rothschild collected by the author at Ricaurte, Dept. of Narino, Colombia, June 27, 1957 (type in USNM).

Diagnosis: One of the smaller species (length 1.66 mm.), practically the same length as *complicatus* but differs as follows: Head longer (0.314 against 0.303, at temples), frons wider (0.326 against 0.303), and pterothorax slightly longer and narrower.

Genitalia differ from two previously mentioned species by thicker parameres and in the different shape of the supporting struts of endomeral sac. This male is in perfect condition, with chaetotaxy complete.

*Desumenopon hyperythrus complicatus*, new subspecies

FIGURES III:14,17,20

Holotype male, allotype female, and one paratype from *Odontophorus melanonotus* Gould collected in Ecuador (type in USNM).

Diagnosis: Closely allied to *hyperythrus*, both in shape of head and movable sclerite of genitalia. Differs from the nominate race in much shorter body, shape of genitalia, especially of parameres, and in the occipital margin of head. The male is the smallest of the genus now known (length 1.58), the width of frons also the narrowest (0.30), and length of head at occiput is shortest (0.25). This brief diagnosis, together with the figures and data in the key are sufficient for its recognition.

*Desumenopon speciosa*, new species

FIGURES III:13,16,19

Holotype male from *Odontophorus speciosa speciosa* Tschudi collected in East Peru (type in USNM).

Diagnosis: A rather large species (length 1.70), with uniformly circular frons and very short prothorax ( $0.174 \times 0.347$ ); the frons unusually wide in proportion to width of temples (frons 0.31, temples 0.40).

The basal portion of the basal plate is long and slender, parameres are comparatively short, slender, and recurved, and with the movable sclerite quite unique. The key and table of measurements give additional information for its identification.

## References

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