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*Chelodesmid studies. XVII. Revalidation of the
generic name Odontopeltis Pocock 1894, with the
description of a new species and notes on other
members of the group¹*

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Information accumulated the past decade, in connection with a projected revisionary study of the family Chelodesmidae, is of interest in shedding light on the taxonomy and nomenclature of numerous species and genera of this predominantly Neotropical group. Many short preliminary papers relating to chelodesmids have been published under the present collective title; others are now in press. As completion of the family revision will still require several years, it seems desirable to continue with the advanced documentation of those taxa which are of special interest.

This note clarifies the status of the largest known members of the Chelodesmidae, several species endemic to southeastern Brasil which have existed for nearly a century under incorrect generic names. There is no justification for the continued disregard of *Odontopeltis* as a valid name based on a Brazilian species. In my opinion there can be no doubt that its type species, *Polydesmus conspersus* Perty, belongs to the group of large forms found in Minas Gerais and Espiritu Santo, currently going under the name *Storhthotropis*. This genus was reviewed by Schubart (1949) who redescribed an old species and published the account of a new one, without, however, critically appraising the nomenclatorial situation.

The tribal position of this taxon cannot be asserted with confidence at this time. Although singular in external appearance, as well as in the complete absence of a gonopodal prefemoral process, *Odontopeltis* probably belongs in the vicinity of *Telonychopus*, *Leiodesmus*, and *Manfrediodesmus*, as strongly suggested by similarities in shape of the gonopod coxa.

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Odontopeltis

- Rhacophorus* Koch, 1847, Syst. Myriap., fasc. 59, p. 137. Proposed for two species, one of them new. Type species: *Polydesmus conspersus* Perty, 1833, by subsequent designation of Pocock, 1909. Preoccupied by *Rhacophorus* Kuhl & Van Hasselt, 1822 (Amphibia).
- Odontotropis* Humbert & DeSaussure, 1869, Rev. & Mag. Zool., ser. 2, vol. 21, p. 152. Proposed as a subgenus of *Polydesmus* to include one new species, *P. (O.) clarazianus*. Preoccupied by *Odontotropis* Agassiz, 1846 (Pisces).
- Odontopeltis* Pocock, 1894, Jour. Linnean Soc. London (Zool.), vol. 24, p. 509. Proposed to replace *Rhacophorus* Koch, but without designation of a type species.
- Storhotropis* Attems, 1938, Das Tierreich, lief. 69, p. 200. Proposed to replace *Odontotropis* Humbert & DeSaussure, 1869. Type species: *Polydesmus (Odontotropis) clarazianus*, by direct substitution. New Synonymy!
- Storhotropis*: Schubart, 1949, Rev. Brasil. Biol., vol. 9, p. 18.

The foregoing synonymy is largely self-explanatory. *Rhacophorus* could not be utilized, being preoccupied, and the next oldest name, *Odontotropis*, unfortunately had the same fate. Thus Pocock proposed *Odontopeltis* in 1894 to replace *Rhacophorus* but did not indicate a type species, and, moreover, gave no indication that he considered *Odontotropis* to be in any way related. In 1896, Silvestri published a classification of Diplopoda in which he cited type species for every genus except *Odontopeltis* (a curious omission), and so lost the opportunity to typify this name. It was not until 1909, in the *Biologia Centrali-Americana*, that Pocock reviewed the entire situation and at last selected *Rhacophorus conspersus* Perty, one of the two originally-included species of *Rhacophorus*, to stand as type of the substitute name *Odontopeltis*. Graf Attems dismissed Pocock's action, and in 1938 proposed the new name *Storhotropis* to replace *Odontotropis*, on the grounds that neither Koch nor Pocock gave a useable diagnosis and that the species described in *Odontopeltis* were either unrecognizable or referable to other genera. Attems had an obsession for verbal diagnoses to validate genera, regardless of how well known the respective type species might be. It is likewise curious that in his 1938 treatment, in which *Odontopeltis* was entered under "Unsichere Gattungen", Attems stated only "Patria?" for *conspersus* despite the fact that Perty's description, clearly stating that the type came from Minas Gerais, was available to him in the Naturhistorisches Museum, Wien, and he surely examined it.

Odontopeltis conspersus (Perty)

- Polydesmus conspersus* Perty, 1833, *Delectus Animalium articulorum. . . per Brasiliam. . . colegerunt Dr. J.B. de Spix et Dr. C.F. Ph. de Martius*, p. 210, pl. 40, fig. 8. Holotype apparently a female, originally in the Zoologisches Staatssammlung, Munchen, apparently no longer in existence, from the mountains of the state of Minas Gerais, Brasil (Spix and Martius, legg.).
- Polydesmus conspersus*: Gervais, 1847, Hist. Nat. Insect. apt., vol. 4, p. 113.
- Rhacophorus conspersus*: Koch, 1847, Syst. Myriap., p. 137.—Koch, 1863, Die Myriapoden, vol. 2, p. 53, pl. 86, fig. 175.
- Odontopeltis conspersus* (by implication): Pocock, 1894, Journ. Linnean Soc. London (Zool.), ser. 2, vol. 24, p. 509.—Pocock, 1909, Biol. Centr.-Amer., Chiloda & Diplopoda, p. 168.

Diagnosis: A small member of the genus (width of female about 16 mm) in which the peritremata extend nearly or completely to caudolateral angles of paranota and thus fail to produce the effect of a bidentate corner as in other species.

Remarks: It is curious that no one has suggested that *conspersus* might be congeneric with *Odontotropis clarazianus* and *Storthotropis giganteus*. The original type specimen was redescribed and figured by Koch (1863) who had access to material in the Munich collection ("Dasselbe Exemplar, von welchem Dr. Perty seine Beschreibung mit Abbildung entnommen hat. . ."). Although Koch gave only "Brasilien" as locality, the original description specifies Minas Gerais as the source of the specimen. Taking into account size and paranotal outline, as well as the fact that the other species are endemic to the same part of Brasil, it seems to me highly probable that *conspersus* is congeneric with the other two taxa mentioned. It remains for future field work to discover specimens that match Koch's illustration in details of paranotal structure.

Odontopeltis clarazianus (Humbert & DeSaussure), new comb.—Figs. 1-3, 7, 9.

Polydesmus (Odontotropis) Clarazianus Humbert & DeSaussure, 1869, Rev. et Mag. Zool., ser. 2, vol. 21, p. 152.—1869, Verh. bot-zool. Gesellsch. Wien. vol. 19, p. 692.—Miss. scient. Mexique, Myriapoda, p. 53, pl. 2, fig. 4. Holotype female (Mus. hist. nat. Geneve) from "Argentina".

Odontotropis clarazianus: Attems, 1898, Denkschr. Akad. Wien, vol. 67, p. 408.

Storthotropis clarazianus: Attems, 1938, Das Tierreich, lief. 69, p. 200—Schubart, 1949, Rev. Brasil. Biol., vol. 9, p. 20 (with additional bibliographic citations).

The precise identity of this name remains in a little doubt. The original description was based on a female specimen, said to be from Argentina. The later account published in 1872 mentions also a male, but gives no particulars. In 1895, E. Goeldi reported a specimen, though by him to be *clarazianus* or a closely related species, taken in the Serra dos Orgaos (Est. Rio de Janeiro), and some years later Brolemann (1900a, b) published two accounts, with gonopod drawings, based on Goeldi's specimens under the confirmed name *clarazianus*. However, Brolemann's identification could only be considered provisional as it was based solely on the basis of external appearance, the gonopod structure of *clarazianus* being then unknown. Schubart (1949) correctly doubted the locality "Argentina" for the species, and suggested that the type had been mislabeled. However, at the same time he accepted without question Brolemann's identification of Goeldi's specimens from Therezopolis as *clarazianus*, *sensu* Humbert & DeSaussure, 1869, and recorded additional material from several nearby localities in Minas Gerais.

The Museum d'Histoire naturelle de Geneve contains a male and two females identified as *clarazianus*. One of the females carries the label "*Polydesmus Clarazianus* Sss., La Plata, Mr. Clarouz" and this presumably is the holotype. Unless it can be shown that a small place (perhaps an estate or mine) named "La Plata" once existed in the mining districts of Minas Gerais, we must assume that name was intended to mean the Plata River (or the vicinity of Buenos Aires) and was therefore incorrectly attached to the specimen. The other two specimens do not have locality labels, but appear from all external features to be conspecific with the type. The male is, presumably, the same one mentioned by Humbert & DeSaussure in 1872. Although it has no type status, it can certainly serve as a

reasonably authentic model from which to postulate the genitalic characters of *clarazianus*. A gonopod drawing made from this male (Fig. 9) appears to differ in details of the apical processes of the gonopod from that of a specimen from the Rio Matipoo, Minas Gerais, illustrated by Schubart (1949: fig. 2). It is not certain at this time if these apparent differences are due to slightly altered aspects of observation, to normal intraspecific variability, or to some geographic variability.

Owing to the small number of specimens seen, and the insufficiency of geographical data, I prefer to leave unsettled for the present time the question, which variant should be taken as typical of *clarazianus*? It is entirely possible that neither of the three males discussed above are conspecific with the female holotype. Considering the large size of these millipeds and their supposed abundance in certain seasons (noted by Schubart, 1949), a resident Brazilian naturalist could obtain the necessary material to resolve the questions posed above.

Two male specimens in the collection of the British Museum differ from those just discussed in several respects, and are tentatively considered to represent a different species, generally more similar to *clarazianus* than to *giganteus*.

Odontopeltis anchisteus, new species. — Figures 4-6, 10, 11.

Type Male (Brit. Mus. Nat. Hist. 1873.30) labeled only "Minas, Brazil/A. Fry".

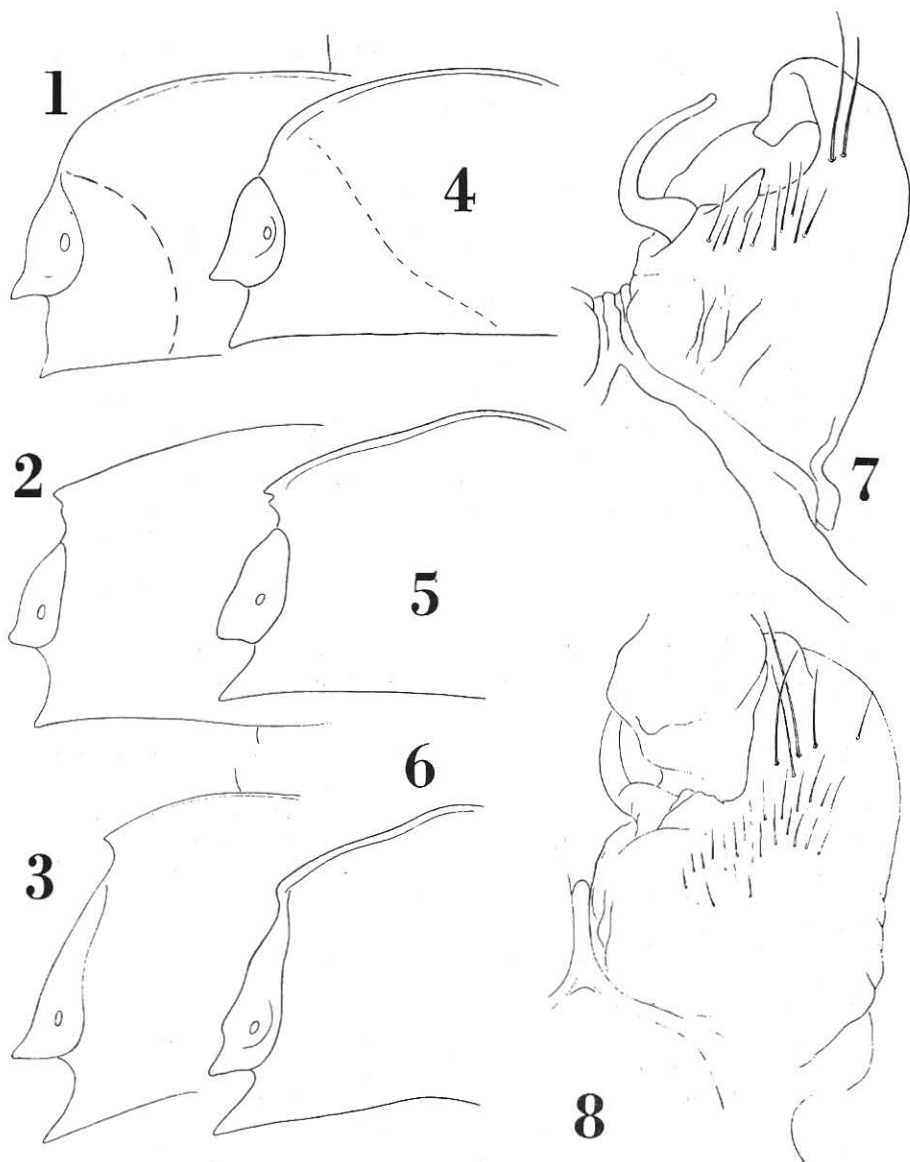
Diagnosis: Closely related to *O. clarazianus*, differing in somewhat smaller size (length less than 90 mm), larger peritremata set closer to posterior corner of paranota (cf. figs. 1-3 and 4-6, and by details of gonopod structure, particularly shape of the median distal branch and conical projection of proximal prefemoral region.

Holotype: Coloration much faded, at present dark reddish brown, almost maroon dorsally, with anterior margin of collum, caudolateral half of paranota, apex of epiproct, and antennae yellowish; legs light brown.

Length approximately 87 mm. (specimen much broken); widths of alternate segments across paranotal maxima:

segment 1 - 15.9 mm	segment 12 - 17.0 mm
4 - 18.0	14 - 16.2
8 - 17.8	16 - 15.2
10 - 17.6	18 - 9.0

Body widest at segments 3 and 4, thence tapering very gradually back to segment 15, after which more abruptly. W/L ratio at midbody, 20%. Paranota large, set high on segments and nearly horizontal, middorsum only slightly convex. Segments moderately constricted, stricture most evident on anterior segments where anterior edge forms a broadly overhanging rim; near midbody the edges are poorly defined and the surface finely costulate. Surface of prozona microscopically coriarius, that of metaterga uniformly vermiculate-coriaceous dorsally; dorsum of paranota and sides of metazona uniformly finely tuberculate-granulate. Paranotal armature of the form shown in figures 4 to 6; paranota of 19th segment reduced to small, apically notched lobes. Epiproct, paraprocts, and hypoproct unmodified; surface of paraprocts smooth and glabrous; hypoproct acutely triangular, without projecting paramedian tubercles.



Figures 1-3. *Odontopeltis clarazianus*, left paranota of segments 5, 10, and 16, dorsal aspect. Figs. 4-6. *Odontopeltis anchisteus* n. sp., the corresponding paranota. Fig. 7. *O. clarazianus*, coxa of right gonopod, dorsal aspect, telopodite removed, showing lateral condyle. Fig. 8. *O. giganteus*, coxa of right gonopod, base of telopodite shown. Dashed lines in figures 1 and 4 show distribution of yellow pigment.

Sterna prominently elevated, smooth and glabrous, those of last two segments produced into small but distinct acute subcoxal spines. Legs stout, unmodified, femora strongly clavate; podomeres nearly glabrous except for apical whorl of short, stout setae, and dorsal surface of tarsi, set with short, heavy, blunt, flattened setules. No subtarsal soles or prefemoral knobs. Stigmata elongated vertical slits, the anterior slightly the longer, edges not elevated; supracoxal condyles produced laterad as small acute spines.

Anterior sterna without processes. Coxae of second pair of legs produced into conical distal projection; other anterior legs unmodified. Gonopod aperture transversely oval, small relative to size of animal, not displacing path of stricture midventrally. Gonopods of the form shown in figures 10 and 11. Coxa robust, with dorsal field of setae but without trace of apophysis; telopodite nearly straight, similar to that of *clarazianus* (cf. Fig. 9) but differing in details of apical processes, notably the median; proximal end of prefemur distinctly more conically produced.

Remarks: A second specimen, without BMNH register number, is labeled only "Sante Fe, Minas Gerais" and was acquired in the L. Koch material of arachnids and myriapods. This animal, a male in good condition, agrees very closely with the holotype. I have so far been unable to locate "Sante Fe."

This taxon is obviously closely related to *clarazianus* and perhaps subspecific status will be found appropriate for the two. The name *anchisteus* is a Greek word meaning "next of kin".

***Odontopeltis giganteus* (Schubart), new comb.-Figs. 8, 12.**

Storhthotropis giganteus Schubart, 1949, Rev. Brasil. Biol., vol. 9, p. 22, figs. 3, 4.

Holotype male (Mus. Zool. Univ. Sao Paulo) from an unspecified locality in Espiritu Santo, Brasil.

Schubart accurately stated the differences in color, paranotal shape, and gonopod structure between this species and *clarazianus*. However, there is some reason to doubt the accuracy of the 130 mm length cited for one of his specimens. The other four specimens in the type series were shown to be 100 mm long (just a little larger than males of *clarazianus*) with widths of 18.0 to 19.2 mm, the latter being broader than the very large specimen which was recorded to be only 19 mm wide. A normal specimen 130 mm long would be expected to have a tergal width of at least 23 mm, and it may be that some error occurred in recording the measurements. The specific name *giganteus* may in fact not be so appropriate for this milliped.

The collection of the Zoologisches Museum, Hamburg, contains a single male *Odontopeltis* from Espiritu Santo, collected by "Michaelis" (without further data). This specimen had been examined by Attems, who misidentified it as *clarazianus*. Had he compared the animal with the habitus drawing of that species published by Humbert & DeSaussure in 1872, he would surely have noticed the differences in paranotal outline and distributional of paranotal color. It is in fact a specimen of *giganteus*, as evident from these points as well as its gonopod structure. The drawing that I made of the left gonopod (Fig. 12) differs slightly from that given by Schubart, but I think this might be due to the fact that his sketch seems to have been made from a slide preparation on which the apical end of the telopodite was tilted downward to a level lower than the coxa, and thus appearing somewhat foreshortened.

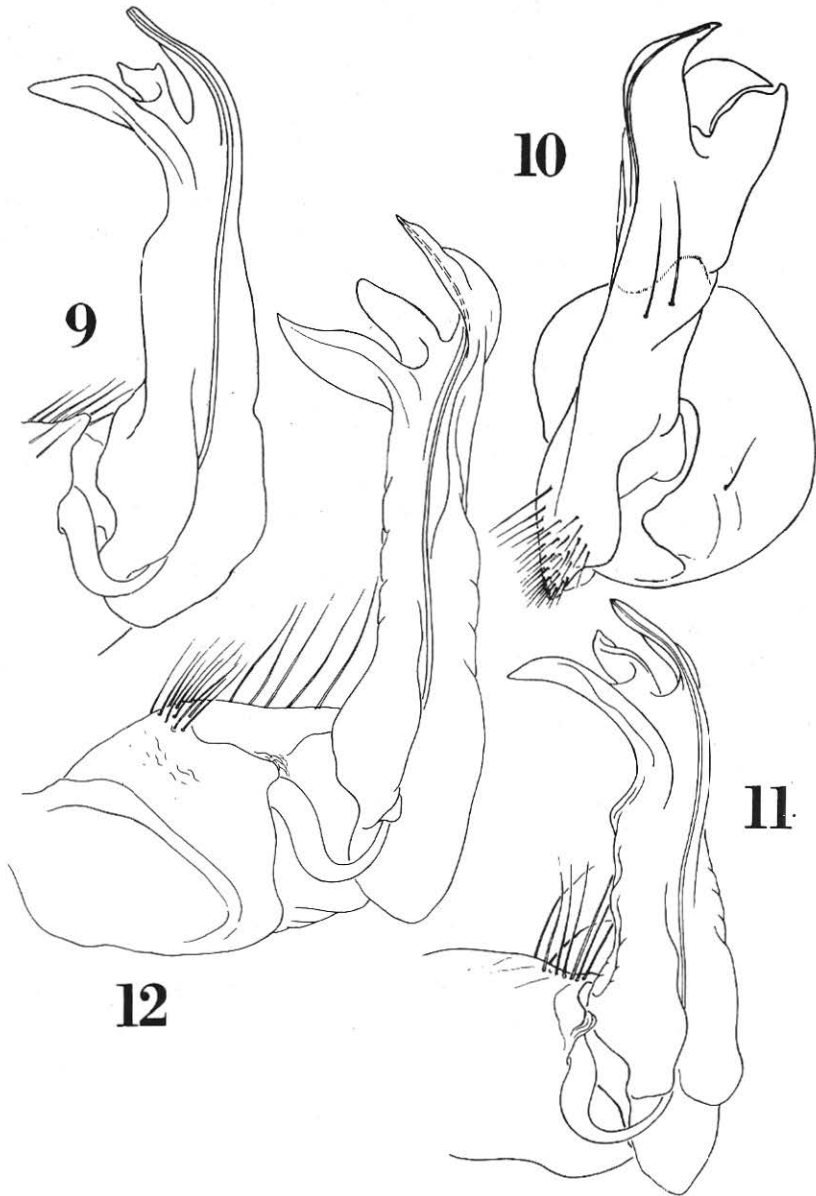


Figure 9. *O. clarazianus*, telepodite of left gonopod, mesal aspect. Fig. 10. *O. anchisteus*, left gonopod, ventral aspect. Fig. 11. The same gonopod, mesal aspect. Fig. 12. *O. giganteus*, left gonopod, mesal aspect. All drawings made X 45.

The Hamburg specimen is 99 mm in length, with a maximum width of 18.5 mm at segment 4. Posterior to this point the metaterga gradually decrease in width to 18.0 mm at segment 8, 17.4 mm at segment 12, and 15.6 mm at segment 16. The coloration, after an unknown time of preservation, is uniformly maroon dorsally, with caudolateral halves of paranota, an anterior median spot on collum, and tip of epiproct bright yellow. Just as stated by Schubart, the yellow paranotal spots do not extend forward to the anterior corner.

It is most regrettable that there are still no precise locality data available for this big and striking millipede. Brazilian naturalists should be challenged to correct such a deficiency, before the last indigenous forests are destroyed.

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