

Notes on some *Tetracha*-species

Studies of Tiger Beetles – CXV

(Coleoptera: Cicindelidae)

Fabio CASSOLA

Abstract: Upon examination of recently collected material, *Tetracha flammula* (Horn, 1905), from eastern Ecuador, is considered to be specifically distinct from the syntopically occurring species, *T. fulgida* (Klug, 1834). In the same way, *T. speciosa* Chaudoir, 1860, from north-eastern Brazil, is also considered to be a full species, other than the syntopically occurring *T. rutilans* Thomson, 1857.

Zusammenfassung: Aufgrund neueren Materials wird festgestellt, daß *Tetracha flammula* (Horn, 1905) aus dem östlichen Ecuador nicht mit *T. fulgida* (Klug, 1834) identisch ist. Ebenso wird *T. speciosa* Chaudoir, 1860 aus Ost-Brasilien als nicht conspezifisch mit *T. rutilans* Thomson, 1857 eingestuft.

Discussion and results

The knowledge of Neotropical tiger beetles has been remarkably improved recently, thanks to the taxonomic revisions of such important genera as *Ctenostoma* (NAVIAUX 1998), *Oxycheila* (WIESNER 1999), *Pseudoxyscheila* (CASSOLA 1996, 1997), *Oxygonia* (KIPPENHAN 1997), and others. The only large Neotropical genus still in need to be reviewed is the Megacephaline genus *Tetracha*, that both HORN (1905, 1908–15, 1926), BASILEWSKY (1966) and WIESNER (1992) considered to just be a subgenus of the African genus *Megacephala* Latreille, 1802, but which, perhaps more correctly, was raised again to full generic status by HUBER (1994).

The revision of such a large genus is obviously a difficult task, due to the large number of described taxa (137 names have been applied to it so

far), the not always well-cut distinguishing features and characters, and the need of checking and examining so many type specimens in old Nineteen Century's collections. However, the time is come for somebody to finally face such a task, as intensive field collecting has been done in recent years by several American colleagues or by occasional European collectors, and much new material has been accumulated which will may prove to be helpful or even instrumental to better ascertain synonymies and to possibly describe several new species.

As a contribution to such a task, I am offering here the results of my study of two supposed subspecific taxa (WIESNER 1992), which proved instead, thanks to some recently collected material, to be clearly distinct full species.



Fig. 1: *Tetracha rutilans* Thomson, 1857, male specimen from Maranguape, Ceará, Brazil: mandibles and labrum (a), aedeagus (b). *Tetracha speciosa* Chaudoir, 1860, male specimen from same locality: mandibles and labrum (c), aedeagus (d). Scale-lines: 1 mm.

1. *Tetracha flammula* was described by HORN (1905) from Ecuador ("Santa Inez, Haensch"), but it was later considered (HORN 1908–15, 1926; WIESNER 1992) to merely be a form of or synonymous with *Tetracha fulgida* (Klug, 1834), a widespread Amazonian species described from southern Brazil ("Aus Süd-brasilien") (KLUG 1834). According with HORN's description, *flammula* differs from *fulgida* because of slight differences in elytral punctuation ["elytris postice plerumque minus breviter rotundatis, antice et in medio seape grossius punctatis, ad apicem punctatis non tuberculatis"] and especially in body colour ["tota corporis superficie aureo-purpureo-nitidissima (marginem versus viridi-orichalcea)"]. PEARSON et al. (1999) have recently treated it under *fulgida* ("The form *flammula*

W. Horn occurs in Ecuador and is variously considered a subspecies of *fulgida* or a distinct species”).

However, both forms have been recently collected by my friend and colleague G. ONORE (Quito, Ecuador), on 3 June 1997, while sympatrically living in the very same locality (Sc. Yasuni, 250 m above sea level, Napo province, Ecuador), in the Amazonian region called El Oriente. Although very similar with each other, and while lacking any good distinguishing features, the two species can easily be told apart from each other because of their different body colour, which, near *flammula*, is darker, less cupreous, more dark purpureous, with a less amount of metallic green at sides. The verified sympatry of the two forms clearly demonstrates their distinct specific status.

2. *Tetracha speciosa* was described by CHAUDOIR (1860) from Brazil (“Découverte par M. Mocquerys fils à Bahia”), but it was later considered (HORN 1905, 1908–15, 1926) to be conspecific with *Tetracha rutilans*, a species which had also been described from north-eastern Brazil (“Pernambuco”) (THOMSON 1857). Both species are conspicuous and easily separated from all other *Tetracha* species because of their bright green elytra, which have a large apical yellow patch acutely extending on disc up to the middle of the elytral length. However, CHAUDOIR (1860) had already emphasized, quite correctly, the larger size of *speciosa*.

Contrary to HORN's opinion, conspecificity of these taxa cannot be retained any more, because both of them appear to have been recently collected in the very same locality, i. e. Maranguape, inland from Fortaleza, in the Brazilian north-eastern province Ceará, on 17 February 1995, by S. MIGLIOLI. Specimens of *T. speciosa* superficially look like large *rutilans* specimens, but upon closer examination males proved to have a different, much larger aedeagus, and moreover a different arrangement in the mandible teeth formula (four teeth in both left and right mandibles) (fig. 1 b, d), in comparison with *rutilans* (four and three, respectively) (fig. 1 a, c).

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Author:

Dr. Fabio CASSOLA, Via F. Tomassucci 12/20, I-00144 Roma.
e-mail: fabiocassola@Skynet.it

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Autor(en)/Author(s): Cassola Fabio

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