

The above-given description of this subspecies is taken from adult male and female specimens from the Rio Cianati, Darien, kindly lent to me for the purpose by Dr. A. Borelli.

A comparison of the female with the type of *Tityus championi*, Poc., from Bugaba, Panama, convinces me that the two are conspecific, and that the supposedly specific characters of the latter are due to immaturity. In most structural points the two are practically alike, the chief differences being the absence of the pectinal lobe, the thinner hand, more granular caudal keels, and the variegated coloration of the type of *T. championi*.

The adult male, as described above, is a tolerably uniform deep blackish-brown colour, with scarcely a trace of paler spots, except on the posterior angles of the terga. The female, on the contrary, which, although adult, is rather smaller, is distinctly redder than the male, especially on the tail and chelæ, and the terga exhibit a distinct angular yellow spot and four smaller less distinct spots on the posterior margin on each side of the middle line. The type of *T. championi* is smaller still and very considerably paler, the prevailing coloration being yellowish-brown with darker mottling; the legs are indistinctly annulated, the chelæ are reddish-yellow with very indistinct pale spots, the fingers being blackish with yellow tips; three dark bands are traceable on the terga, and the posterior yellow spots on these plates are very distinct; the sides of the caudal segments are paler in the middle than in front and behind, and the vesicle and lower side of the fifth segment are nearly black. Its measurements are as follows:—Total length 62 mm., tail 39, carapace 6·5; width of hand 2·5; length of underhand 4·5, of movable finger 9. In a second, but much smaller, specimen from Bugaba measuring 30 mm., with the carapace 3, and the tail 18, the variegated coloration traceable in the type is much more pronounced, the specimen closely resembling in colour the species of *Tityus*, typified by *T. columbianus*, *T. silvestris*, &c. It is noticeable that the humerus and brachium are palely fuscous with yellow spots, and that the clear yellow hand contrasts strongly with the fuscous tint of the fingers, which have clear yellow tips. This species, in short, is prettily variegated with black and yellow in its young stages, and gradually assumes a darker hue as it approaches maturity, becoming ultimately, when adult, almost entirely black. It is highly probable that all the numerous allied species pass through similar stages of coloration.

## 2. *Tityus festæ*. (Tab. IX. fig. 4.)

*Tityus festæ*, Borelli, Boll. Mus. Torino, xiv. no. 338, pp. 1–3 (1899) <sup>1</sup>.

♂. Resembling the male of *T. cambridgei* in colour and most structural points, but with the caudal crests much more coarsely granular, the inferior crests of the fourth segment distinctly granular; the first segment as wide as the fourth. *Chelæ* much shorter and the hand broader; the brachium only a little longer than the carapace, and about three times as long as wide; the hand much wider than the brachium, its width more than half the length of the underhand, the latter much more than half the length of the movable finger; the movable finger about as long as the fifth caudal segment, longer by one-fourth of its length than the carapace, both fingers strongly lobate, but not widely separated at base. *Pectinal teeth* 20–21.