SCIENTIFIC NOTE

THE STATUS OF *TYLOCERUS CRASSICORNIS* (DALMAN, 1823), TYPE SPECIES OF *TYLOCERUS* DALMAN, 1823 (COLEOPTERA: CANTHARIDAE: SILINAE)

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Tylocerus Dalman, 1823 and its type species (by monotypy), *Telephorus* (*Tylocerus*) *crassicornis* Dalman, 1823, were described with a type locality of Jamaica, from material attributed to Johan Erik Forsström (1775–1824), deposited in the collection of Gustaf Freiherr von Paykull (1757–1826) (Dalman 1823). Paykull's collection passed to the Naturhistoriska riksmuseet in Stockholm (NHRS) (Horn and Kahle 1935), and the type is indeed found in that museum under accession number NHRS-JLKB000021063 (Johannes Bergsten, *in litt.*). The type is a single damaged male, missing the abdomen (Figs. 1–3). It is marked “Holotype” but since Dalman did not specify the number of specimens he saw, it should be considered a syntype. It is here designated **lectotype** in order to stabilize the name, and a label stating that fact is added to those in Fig. 3. Forsström's own West Indian collection passed to Gustav Johann Billberg (1772–1844), then to John George Children (1777–1852) and to the Natural History Museum, London (Horn and Kahle 1935). However, it is clear that any specimens from that pathway would not be syntypes.

The geographic origin of this species has been and is the subject of much confusion. The issue first arose when Lacordaire (1857) mentioned a specimen from Saint-Barthélemy (St. Barths) that matched the description of the Jamaican species. It is clear he did not see the type from Jamaica and was working only from the description. The

repository for this St. Barths specimen is unknown, Lacordaire's collection having been dispersed after his death (Horn and Kahle 1935), and no one has mentioned seeing it since. Gorham (1898) listed both Jamaica and St. Barths for the species. Leng and Mutchler (1922) noted Lacordaire's statement and added that records attributed to the collector of the type, Forsström, were mostly from St. Barths; they decided that the record referred to that island. In fact, Forsström was a Swede who served as a pastor and physician in the Swedish colony of Saint-Barthélemy from 1802–1815 (Papavero 1971). He traveled to other islands as well, at least to Saba and somewhere in Guadeloupe (*loc. cit.*), and, of course, it is obviously possible that he obtained specimens from other West Indian islands or beyond.

With no more evidence than this and the fact that they did not have matching specimens from Jamaica (in spite of having no specimens from St. Barths either), Leng and Mutchler suggested the type locality was incorrect, and the species was really from St. Barths. Blackwelder (1945) listed the species from “?Jamaica” and “St. Barthélemy.” Paulian (1947) included the species in his treatment of the Cantharidae of the French Antilles (Saint-Barthélemy by then being French) but stated that the species had not been reexamined since the original description, meaning he saw neither the type nor Lacordaire's St. Barths specimen.

Figs. 1–4. *Tylocerus crassicornis*. **1)** Lectotype, male, dorsal view; **2)** Lectotype, lateral view; **3)** Labels of *Telophorus* (*Tylocerus*) *crassicornis*. Photographs by Johannes Bergsten, ©NHRS, used with permission; **4)** Cleared male terminalia of BMNH specimen 40; 14-1; 4441, dorsal view.

However, he asserted that the Jamaica record was an error and recorded it only from St. Barths, entirely on the basis of the Lacordaire/Leng and Mutchler argument. Delkeskamp (1977) dropped the St. Barths record and listed it only from Jamaica. Peck (2011) reinstated the St. Barths record and added one for Guadeloupe without explanation.

Lastly, Constantin (2010) illustrated the holotype, in the Muséum national d'Histoire naturelle, Paris, of the only *Tylocerus* recorded from the mainland – *Tylocerus cayennensis* Pic, 1910. From the photograph, it seemed likely to be a synonym of *T. crassicornis*. Upon inquiry, Robert Constantin kindly provided us with additional photographs of that type, including its genitalia and labels, and surprisingly it is an exact match with *T. crassicornis*. However, the actual origin of the species is still in question. The labels on Pic's type include a green disc with "Cayenne" and a second green disc with "?: cayennensis; Buq.; Cayenna." The second label is interpreted to indicate that the specimen was sold by Lucien Jean Baptiste Buquet (1807–1899), an important French entomologist and insect retailer in Paris (Leprieur 1890). Apparently, the specimen was sold as an undescribed species to someone

who added the second label. How or when it came into the possession of Maurice Pic is unknown, but he described it using the name from the label in 1910.

The lectotype in the NHRS has no geographic data associated with it (Fig. 3). A series of four male specimens in the Natural History Museum, London (BMNH) are pinned on the same exact make of pin as the NHRS specimen, and the type falls within the variation of the London series. Register numbers on the BMNH specimens show they came from the Children collection (M. Barclay, *in litt.*) and may therefore theoretically originate from Forsström. But they are certainly not syntypes, as they were not part of the Paykull collection. In any case, they are from the same general time period as the type and are conspecific. The lead London specimen bears a handwritten label [*crassicornis*; ? Dalm.; "E. Indies."] below a round label with the BMNH entomology register numbers "40; 4-1; 4440." The other specimens have only the round number label excepting the substitution of individual numbers 4438, 4441, and 4442. One of these specimens has an abdomen attached, and the genitalia are as in Fig. 4.

Only Peck's (2011) record can be rejected on the basis of clear evidence, and it is probably a simple error. Peck only summarized literature records in his paper, and no such Guadeloupe record seems to exist. Perhaps the fact that Paulian (1947) listed the species mislead Peck to think that was a Guadeloupe record, in spite of the clear statement it was only a literature record from St. Barths. However, the East Indian record can also be debunked as the specimens are clearly a member of the New World *Tylocerus*, and the genitalia are most similar to some Lesser Antillean forms (Fig. 4). However, the weakly but distinctly clubbed antennae (Fig. 2) differ from all West Indian species we have seen. To date, the only independent specimen with possibly accurate locality data that has turned up is Pic's specimen from Cayenne. Even that specimen's provenance is not as solid as it seems because no other specimen of South American *Tylocerus* has been recorded, in spite of extensive collecting in the three Guyanas, Trinidad, and adjacent Venezuela.

So, the geographic confusion still reigns. We have Dalman's published locality of Jamaica, the London label saying "E. Indies," Lacordaire's rather weak and unsubstantiated claim of St. Barths which was nevertheless followed by several subsequent authors, Peck's record of Guadeloupe, and Pic's record of French Guiana.

What to do about the type locality and distribution of this species? At the least, we drop the St. Barths and Guadeloupe records. That leaves a choice of Jamaica or the Guyanas. We have no firm basis on which to choose between these options, although northeastern South America seems most likely. We hope that this note and the accompanying illustrations will provide the impetus for others to examine their collections for this species, in order to pin down the actual distribution.

Taxonomic changes are summarized as:

Tylocerus crassicornis (Dalman, 1823)

Telephorus (*Tylocerus*) *crassicornis* Dalman, 1823: 57. **Lectotype here designated**, in the NHRS, labeled "NHRS-JLKB; 000021063/ Mus. Payk./ *Tylocerus*; *crassicornis*; Dalman; det. W. Wittmer/ Holotypus/ 45;74/ Lectotype; *Telephorus*; (*Tylocerus*); *crassicornis*; Dalman; design. M. A. Ivie 2014."

Tylocerus crassicornis; Lacordaire 1857: 348; Gorham 1898: 321; Leng and Mutchler 1922: 494; Blackwelder 1945: 363; Paulian 1947: 163; Delkeskamp 1977: 216, 217; Peck 2011: 27.

Tylocerus cayennensis Pic, 1910: 76. Holotype MNHN. Blackwelder 1945: 363; Delkeskamp 1977: 217; Constantin 2010: 40. **New synonymy.**

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