



## On the identity of *Anchorosternum sinense* (Coleoptera: Hydrophilidae: Megasternini)

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The monotypic genus *Anchorosternum* Jia, Wu, & Pu, 2001 (Hydrophilidae: Sphaeridiinae: Megasterini) was originally described to accommodate *A. sinense* Jia, Wu & Pu, 2001, then known from four specimens collected in dung in southern China. At the time of its description, Jia *et al.* (2001) were unable to compare it with type material of other megasternine taxa occurring in the Oriental region, and as such the genus was largely diagnosed using the key to megasternine genera published by Hansen (1991), which also can be difficult to use without comparative material at hand. Moreover, all four type specimens were lost when the entomological collection of Sun Yat-sen University (formerly Zhongshan University) in Guangzhou, P. R. China, moved to a new building. Consequently, *Anchorosternum* remained the last megasternine genus with unclear status following the revision of recently described hydrophilid genera by Short & Fikáček (2011) and the revision of the Megasternini described previously by the Chinese authors by Jia *et al.* (2011). In 2010, the senior author of this paper found a single specimen of *Anchorosternum sinense* bearing the same locality data as the lost holotype in the collection of the Sun Yat-sen University. This specimen is designated below as the neotype of *A. sinense*. Its detailed study revealed that it is conspecific with *Paroosternum saundersi* (Orchymont, 1925), which makes *Anchorosternum* a junior synonym of *Paroosternum*.

### *Paroosternum* Scott, 1913

*Paroosternum* Scott, 1913: 220. Type species: *P. degayanum* Scott, 1913 (by original designation).

*Anchorosternum* Jia, Wu, & Pu, 2001: 155, **new synonym**. Type species: *A. sinensis* Jia, Wu & Pu, 2001 (by original designation).

**Taxonomic note.** *Anchorosternum* is identical with *Paroosternum* in all external diagnostic characters: (i) antennal grooves not reaching lateral margin of the hypomeron; (ii) median portion of prosternum elevated, with lateral parts deeply excised [character unique for *Paroosternum* within the Megasternini]; (iii) preepisternal plate elongate oval; (iv) metaventricle without anterolateral ridge; (v) femoral lines complete, reaching anterolateral corner of metaventricle [not drawn in the original illustration, but mentioned in generic description]. In addition, the type species of *Anchorosternum* agrees with the previously described species of *Paroosternum* (see below). For all these reasons, we consider *Anchorosternum* as a junior subjective synonym of *Paroosternum*.

### *Paroosternum saundersi* (Orchymont, 1925)

*Oosternum Saundersi* Orchymont, 1925: 289. Type locality: Singapore.

*Paroosternum saundersi*: Hansen (1991: 261, transferred from *Oosternum* to *Paroosternum*).

*Anchorosternum sinensis* Jia, Wu, & Pu, 2001: 157, **new synonym**. Type locality: China, Guangxi province, Nanning.

*Anchorosternum sinense*: Hansen (2004: 61, corrected spelling).

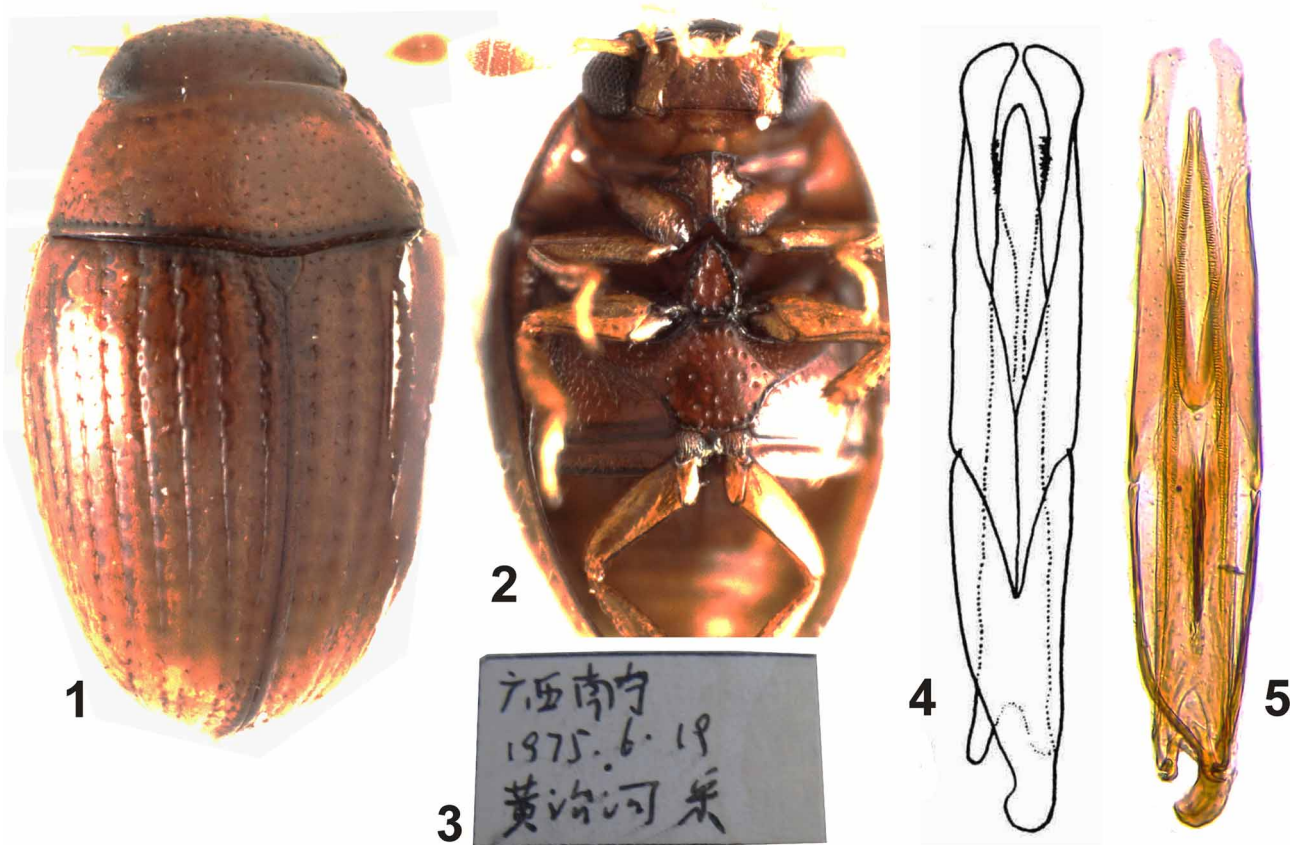
**Type material examined:** *Paroosternum saundersi*: Holotype: 1 unsexed spec. (coll. Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium): “Singapore / Saunders // Moulton don. // A. d’Orchymont det. / Oosternum / saundersi m. / coll. A. d’Orchymont // TYPE // Paroosternum / saundersi / M. Hansen det.”

*Anchorosternum sinense*: Neotype (here designated, Figs. 1–3): female (Institute of Entomology, Life Science School, Sun Yat-sen University, Guangzhou, China): Guangxi, Nanning, 1975.6.19. collected by Zhihe Huang [transcribed from the Chinese]. The specimen bears a pink label: “NEOTYPE / Anchorosternum / sinensis / Jia & Fikáček 2011”.

**Additional material examined:** **INDONESIA: East Sumatra:** 1 male (NMPC): Riau province, Bulit Tigapuluh N. P., 0°50’S 102°26’E, 18.–25.i.2000, lgt. D. Hauck. **LAOS: Vientiane:** 1 female (NMPC): Houayang N. P. (LAO08-2b), 18°05.88’N 102°40.52’E, 180 m a.s.l., 2.vi.2008, lgt. Solodovnikov & Pedersen. **MYANMAR: Tanintharyi:** 1 male (NMPC): Tenasserim, lgt. Helfer. **VIETNAM: Hoa Binh:** 1 male, 2 spec. (IRSNB): “Hoa Binh” [labeled as paratypes, but actually not a part of type series according to the original description].

**Taxonomic notes.** The neotype of *Anchorosternum sinense* corresponds with the holotype of *Paroosternum saundersi* in all external characters of diagnostic importance mentioned by Hebauer (2006): (i) prosternal plate bears simple median carina; (ii) elytral intervals 2 and 4 distinctly narrower apically than intervals 1 and 3; (iii) preepisternal plate of mesothorax widest posteriorly, widely contacting metaventral process and bearing coarse punctation; (iv) pronotum without microsculpture on interstices. In addition, the genitalia illustrated in the original description of *Anchorosternum sinense* (Fig. 4) agree well with the genitalia of *Paroosternum saundersi* in all details (Fig. 5). Hence, we consider *Anchorosternum sinense* as a junior subjective synonym of *Paroosternum saundersi*.

**Distribution and biology.** *Paroosternum saundersi* is widely distributed through tropical SE Asia and is usually collected from mammal excrement (typically, cow dung) as it was also the case in the specimens on which the description of *Anchorosternum sinense* was based.



**FIGURES 1–5.** 1–3: *Anchorosternum sinense* Jia, Wu & Pu, 2001, neotype (1: dorsal view, 2: ventral view, 3: locality label). 4: genitalia drawing from the original description of *Anchorosternum sinense*. 5: genitalia of *Paroosternum saundersi* (specimen from Sumatra).

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