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Species of *Cynaeus* found in Sweden and Finland, with a note on the identity between *Cynaeus depressus* (HORN, 1870) and *Cynaeus opacus* (CHAMPION, 1886) syn. conf. (Coleoptera, Tenebrionidae, Diaperini)

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An introduced species of the American genus Cynaeus LECONTE has been reported from Sweden (ANDERSSON & FERRER 1989) represented by a single specimen collected about 1 mile from Västerhaninge, in Södermanland, 30.viii.1988 by Börje ANDERSSON.

The specimen was found to be identical with specimens determined by John T. DOYEN, in the FERRER collection, as *Cynaeus angustus* (LECONTE, 1851). The species was reported as new for Sweden, and the habitus and aedeagus was figured in Entomologisk tidskrift. This species is listed in LUNDBERG (1986, 1996), Coleopterorum Catalogus Sueciae as CYN ANGU 1960 b.

MANNERKOSKI & FERRER (1992) reported and figured another species, belonging to Cynaeus, as new for Finland, C. opacus (CHAMPION, 1886), identified by FERRER after comparaison with specimens communicated and determined by DOYEN. The 4 specimens found in Finland by MANNERKOSKI, were collected in a waste typ, in Finland, Nummijärvi (6711: 378), 29 and 30 augusti 1990. In the evening, a little before sunset, some specimens were captured on flight and numerous specimens were found crawling on and around old plastic sacks. The inside of the sacks was swarming with thousands of beetles and German Cochroaches Blatella germanica (LINNAEUS). Other coleopterologists collected specimens of the same Cynaeus on the same place.

However, specimens from La Paz, Baja California, collected on 4-9.ix.1967, by J. CHAMSAK & M. MICHELBACHER (Yucca plant), named as *Cynaeus opacus* CHAMPION by DOYEN and used as reference material determining the finish specimens, were found to be nearly identical to specimens determined by DOYEN as *C. depressus* HORN from Palm spr.

Riverside, state Calif., on 27.VI.1959, Mc SWAIN leg., coll. J. FERRER and from Buckman spr., San Diego County, U.S.A. on 14.III.1968, J. POWELL leg., coll. J. FERRER. The specimens of *C. opacus* CHAMPION have a slightly more fulvous pronotum and abdomen, which are darker brown in the specimens labeled as *depressus* HORN.

A male *Cynaeus* species sent to Bengt ANDERSSON by the japanese collector Mr. T. UENO, consisting in a *Cynaeus* species from Hidalgo County, New Mexico, Animas Mts, 1705 m, Godfrey Place, on 24.vi.1981, by Steve DOBROTT, ex coll. T. UENO (coll. Bengt ANDERSSON), was identified as *Cynaeus angustus* (LECONTE) by Dr. C.A. TRIPLEHORN in 1986. This specimen was found to be identical in primary sexual and other characters to *Cynaeus opacus* of MANNERKOSKI & FERRER 1992.

Searching for more specimens of *Cynaeus* in February 2001, Bengt ANDERSSON contacted Dr Charles A. TRIPLEHORN, Ohio University, a world authority in Tenebrionidae. With costumary kindness, he send ANDERSSON specimens of *Cynaeus angustus* (LECONTE), collected by himself from a grain elevator, at Maumee, Ohio, U.S.A.

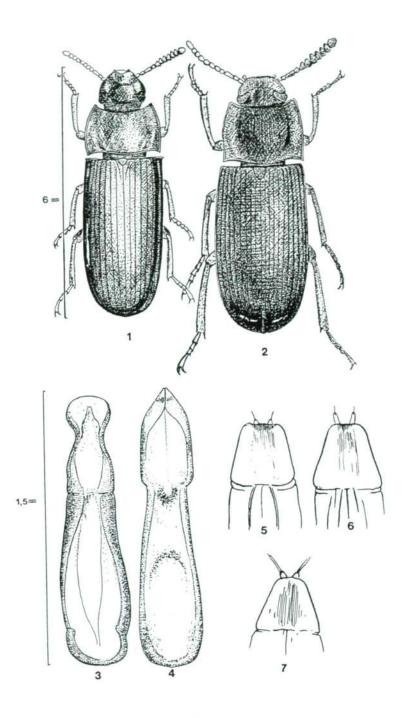
This species was found to be identical to the species previously identified as *C. opacus* by FERRER. Following a communication from TRIPLEHORN to Bengt ANDERSSON, there was no doubt that *C. opacus* CHAMPION and *C. depressus* HORN were conspecific and that the name *C. opacus* CHAMPION was invalidated by synonymy. This was also the opinion of another specialist of Tenebrionidae, Dr. Rolf L. AALBU, Ohio University.

The late Dr. Frank E. BLAISDELL, a great past authority on Tenebrionidae, implied (in litt.) that *C. depressus* HORN is a dark variety of *C. opacus* CHAMPION. Four specimens from Cap Baldy, California, U.S.A. collected in June 1916, 1917, 1919 and 1931 by L.L. MUCHMORE (Los Angeles Museum of Natural History), carry a label with the inscription: "Blaisdell det." and another: "*Cynaeus depressus* Horn/ Black var. 12540". this species is identical in shape and in ovipositor to specimens determined as as *C. opacus* CHAMPION, varying only in the previously mentioned colour difference, to those collected at La Paz, Baja California, Mexico on 4-9.ix.1967 by J. CHAMSAK & M. MICHELBACHER (on Yucca plant). The other species preserved in Los Angeles Museum, *Cynaeus angustus* (LECONTE) was collected in Apple Valley, San Bernardino, California, U.S.A., on 11.vi.1969 by H. MCFARLAND, and determined by SPILLMAN, the specialist who also described the larva of this species (SPILMAN 1986).

In confusing the finnish C. angustus with C. opacus, it is suggested that FERRER may have mixed DOYEN's identification labels, after working on preparation of both species. Examination of all Cynaeus material, preserved in Los Angeles Museum, kindly communicated for this study to Julio FERRER by Dr Charles BELLAMY, tends to confirm this.

As a consequence of this confusion, it is clear that the figure representing Cynaeus "angustatus" (sic) in Entomologisk Tidskrift (ANDERSSON & FERRER 1989), in reality re-

Figures 1-7 (p. 147). 1: habitus of Cynaeus angustus (LECONTE); 2: habitus of C. depressus HORN; 3: Aedeagus of C. angustus in ventral view; 4: aedeagus of C. depressus in ventral view. 5: ovipositor of Cynaus depressus from Los Angeles County, W Fork, S. Gabriel River (Los Angeles Museum); 6: ovipositor from a specimen with redish orange pronotum and abdomen of Cynaeus depressus from Mexico, La Paz, Baja California (Coll. FERRER); 7: ovipositor of Cynaeus angustus from California, Apple Valley, San Bernardino (Los Angeles Museum).



presents Cynaeus depressus HORN, and the figures representing Cynaeus opacus and C. angustus in MANNERKOSKI & FERRER (1992) must be substituted: the habitus and aedeagus figures are not those of opacus, but of C. angustus and vice versa. As stated, the name opacus CHAMPION is also invalidated by synonymy.

Cynaeus angustus (LECONTE) (fig. 1, 3 and 7) is easily recognished and separated from depressus (fig. 2, 4-6) by its much more transverse pronotum, which is proportionately shorter in respect to the length of the elytra, its relatively more convex body, and constricted, and apically rounded, not lanceolate aedeagus. The ovipositor of the female is shorter and more transverse and the hairs of the baculi are much longer. Dr. FERRER apologises for this involuntary confusion of species and reccommend pertinent changes to all labels, collections and catalogues.

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