

BELONUCHUS AGILIS, A FOURTH SPECIES OF THIS GENUS
(COLEOPTERA: STAPHYLINIDAE) REPORTED FROM FLORIDA

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From 1915 until 1991, *Belonuchus rufipennis* (F.) and *B. pallidus* Casey were the only species of this genus reported from Florida (Frank 1986, Smetana 1995). The adults are 4.6-9.0 mm long and, like the larvae, are predatory. The former is the more widespread in Florida and elsewhere in the eastern and southern USA. The latter seems restricted to central and southern Florida. I have often encountered both, under fallen, decomposing citrus fruits, where they feed on smaller insects including fly larvae and perhaps larvae of nitidulid beetles.

Then, in the 1990s, Smetana (1991, 1995) reported *B. gagates* Erichson from the Florida Keys and from Chekika State Recreation Area in Dade County, without habitat information, but with collection records as early as 1971. I have never detected this species in Florida, but had in Jamaica in 1969-1972 found it to be an ecological homologue of the foregoing two species: it likewise is widespread and abundant in fallen, decomposing citrus fruits. Adults of *B. gagates* are totally black and easily distinguished from those of the other two species, which are bicolored, red and black. It seemed obvious that *B. gagates* is an adventive species in Florida, having arrived somehow from the West Indies, where it is known not only from Jamaica but also from the Bahamas, Cuba, Hispaniola, Montserrat, and the US Virgin Islands (St. John and St. Thomas) (Blackwelder 1943).

The only other species known from Jamaica is *B. agilis* Erichson, which I never found in fallen citrus fruits in 1969-1972. Blackwelder (1943) reported it also from Cuba, and listed one habitat as "on *Ceiba* (silk-cotton tree)." Its habitat nevertheless remained mysterious to me until 1985, when I found adults to be plentiful in the yellow flower bracts of *Heliconia caribaea* Lamarck in the John Crow Mountains of Portland Parish in eastern Jamaica. I now have various records of *Belonuchus* spp. in *Heliconia* spp. flower bracts from several countries, which I will discuss in a later paper. I state here, without further detail, that I also collected specimens of *B. agilis* in *Heliconia* bracts in the Dominican Republic in 1987. It seems to me that *B. agilis* is not an exact ecological homologue of the foregoing species because I have not found it to colonize the habitat provided by fallen citrus fruits in Jamaica or the Dominican Republic (I have been denied permission to visit Cuba by the US Treasury Department).

On 9 July 2003, a "multilure trap" in a mango tree in the 7400 block of SW 139th Terrace, Miami, Florida, caught a staphylinid beetle which was later submitted to me for specific identification

(the collector was Division of Plant Industry Inspector Gwen Myres). It was a female of *B. agilis*, lacking the apices of both antennae and some tarsomeres. Specimens of this species may easily be distinguished from other adult *Belonuchus* in Florida by being black, with the last two abdominal segments largely yellow. The species poses no threat to agriculture because adults and larvae are predacious. The method of arrival of this species is unknown, so by default we may call it adventive (it arrived). I do not know whether it arrived in Florida as an immigrant (by wind-assisted flight, or as a hitchhiker aboard an aircraft, from Cuba or Jamaica or the Dominican Republic; if it arrived in an aircraft, it may have been a contaminant of cut *Heliconia* flowers from Jamaica or the Dominican Republic; if it arrived naturally, its most likely source is Cuba), or (vastly less likely) it was introduced (someone imported it deliberately without permit [no permit has ever been issued]). There are thus two native species (*B. rufipennis* and *B. pallidus*) and two adventive species (*B. gagates* and *B. agilis*) of this genus in Florida. One of these (*B. pallidus*) is precinctive to Florida (is known from nowhere else and presumably evolved here). Definitions of these terms are given by Frank & McCoy (1990, 1995). It seems highly unlikely that a specimen of *B. agilis* would have been taken in a "multilure trap" on a mango tree in southwestern Miami (far from Miami airport) unless the species were established, at least temporarily, in southern Florida.

In this note, I am reporting *B. agilis* for the first time from the Dominican Republic and Florida. I made value judgments with inadequate data. I believe that this species has been present in the Dominican Republic for hundreds or thousands of years, but has simply been overlooked by collectors, and may thus be called native. I believe that it has arrived recently in Florida. If my assumptions are correct, the year of first record proves little when comparing the faunas of south Florida and the Greater Antilles. There is no evidence that the species was "introduced" (the unfortunate vocabulary in general use) to either the Dominican Republic or Florida.

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SUMMARY

Belonuchus agilis Erichson (Coleoptera: Staphylinidae), native to Cuba, Jamaica, and the Do-

minican Republic, is newly reported from southern Florida, USA, a state and continental record for an adventive species.

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