



AN UNUSUAL MODE OF LOCOMOTION OF AN ECUADOREAN SLUG *BELOCAULUS* SP. (MOLLUSCA: GASTROPODA: VAGINULIDAE)

ANDRZEJ WIKTOR, TADEUSZ STAWARCZYK

Museum of Natural History, Wrocław University, Sienkiewicza 21, 50-335 Wrocław, Poland
(e-mail: awiktor@biol.uni.wroc.pl, stawar@biol.uni.wroc.pl)

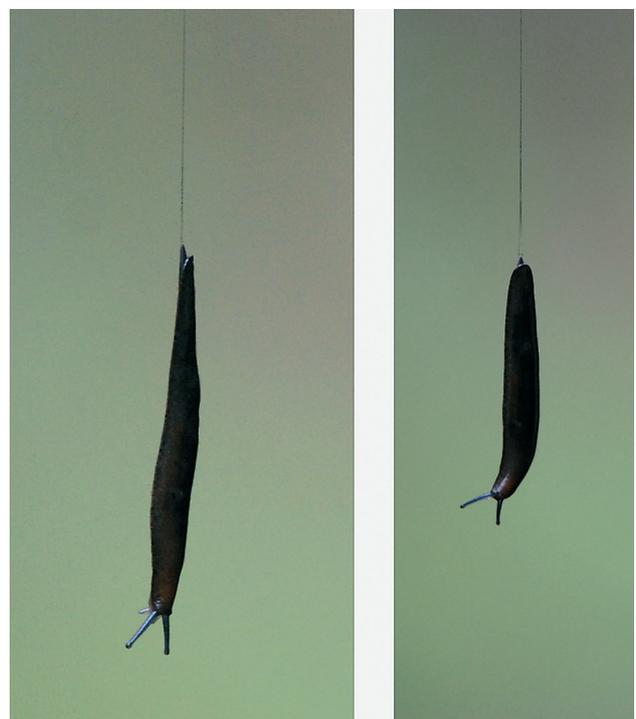
ABSTRACT: A slug of the genus *Belocaulus* can lower itself on a mucus thread from the height of almost 3 m, like a spider on a spider thread.

KEY WORDS: *Belocaulus*, Vaginulidae, mucus, locomotion

During ornithological field work in Ecuador the junior author observed a vaginulid slug lowering itself from a tree branch on a mucus thread, like a spider on a spider thread. The slime thread was about 3 m long. The thread's resistance and its length seemed unusual; producing such a thread must have necessitated a great water expenditure. Some other slugs can hang from a mucus thread, for example the western-Palaeartic Limacidae, but their threads are at most a few to 20 cm long. They hang from a common thread during courtship dance and copulation. Afterwards they often consume a part of the secreted mucus (WIKTOR 1989, FALKNER et al. 1999, NITZ et al. 2009). Using a mucus thread as a "life line", as observed in our slug, was previously unknown (Figs 1–2).

Unfortunately, our specimen was juvenile. It had only primordial genitalia and could not be identified. In these slugs only genitalia-based species identification is reliable. The specimen was collected on the 23rd of October 2009, in Ecuador, province Napo, in the environs of Cosanga, near the Yanayacu Biological Station, at 2,100 m a.s.l., in a cloud forest.

Vaginulids are rather poorly studied, like the whole malacofauna of Ecuador. The widely cited monograph by HOFFMANN (1925) remains the basic source of information on the Vaginulidae. At least six species of the family are known from Ecuador, but the country may hold other species, till now recorded only from the neighboring areas. The kind of habitat



Figs 1–2. *Belocaulus* sp. hanging from a tree by its mucus thread (photo T. STAWARCZYK)

in which the specimen was found seems to exclude introduction, but the possibility of it being an alien species can not be ruled out, since the vaginulids are especially prone to introduction. Despite the very simi-



lar external appearance of the species of the family it seems that our slug was a representative of the genus

Belocaulus Hoffmann, 1925; two members of the genus have been recorded from Ecuador.

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