

QUICK NOTE: *BYBLIS GIGANTEA* AND *B. LINIFLORA*  
TRAPS WORK THE SAME

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The function of traps in the genus *Byblis* is revealed gradually by various researchers. Attracting and sticking flying insects is found to be very effective even in culture. In addition, clumps of several shoots or plants growing together act as “nets” that are able to hold even a butterfly. Prey gets stuck on stalked glands. According to Bruce’s more than a century old study, the sessile glands are activated and begin to release secretions only when prey clings to the stalked glands (Bruce 1907; sec. Lloyd 1942). They are apparently special digestive glands and secrete a solution with hydrolytic enzymes (Hartmeyer & Hartmeyer 2005; Plachno *et al.* 2006). Allan (2019b) found that *B. gigantea* secretes digestive juices overnight.

A peculiar property of stalked glands, consisting in their unusual deformation due to dehydration, was also described a long time ago: Their stalk twists, thereby shortening and collapsing (Darwin 1876). A relatively new study (also a video clip published on the Internet) then explained that the stalked glands of *B. liniflora* are also subject to this deformation after larger prey clings to them. This brings the prey to the sessile digestive glands (Allan 2019a). Thus, the opinion that *Byblis liniflora* traps are passive has been changed. I wondered if *B. gigantea* traps, which are within the genus the most different from *B. liniflora*, also work the same way. The difference between these species lies in the stalked glands, which are much longer in *B. liniflora* (Fig. 1A & B).

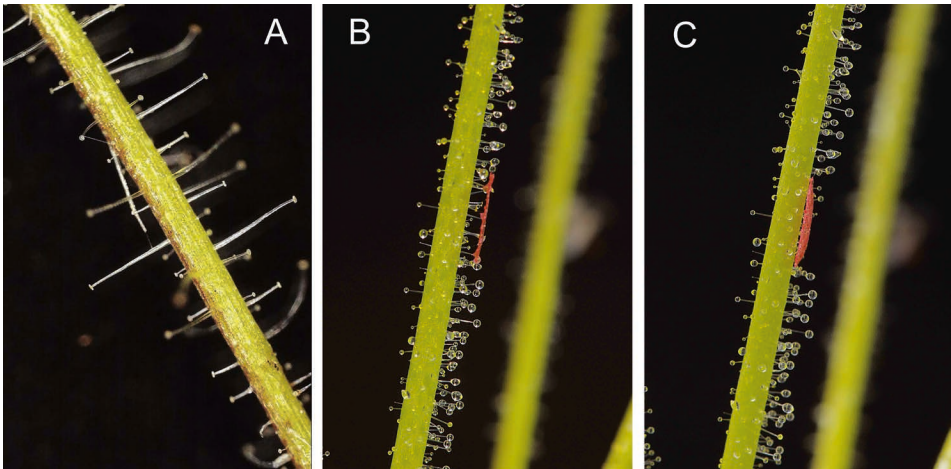


Figure 1: (A) *Byblis liniflora*, greatly enlarged glands on the leaf. (B) The first phase of observing the function of the stalk glands of *Byblis gigantea*. A piece of aquarium fish food has just been placed on the stalked glands. (C) The second phase of observing the function of the stalk glands of *Byblis gigantea* 3.5 hours later. The stalked glands are collapsed, whereby the digestible food particle rests on a surface studded with sessile glands.

## Methods

On April 12, 2022, at noon, I placed pieces of dry TetraMin aquarium fish food on the leaves of the grown *B. gigantea*. The particles of this food have the shape of thin plates, and this is advantageous for observing the distance of this digestible substance from the surface of the leaf or digestive sessile glands. I documented the initial and final state with macro photographs.

## Results

It is proven that the traps of *B. gigantea* are also active, because after capturing a digestible particle (prey) it changes its position so that it rests on the surface with the digestive glands. This process took place within 3.5 hours (Fig. 1B & C).

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