News and views: Germination of 22 year old Drosophyllum lusitanicum and Byblis gigantea seeds.
The title was changed for the electronic version 5 January 2025. The original is below.

Bob Ziemer (rrz7001@humboldt.edu) writes: In 2001, I was cleaning out an old refrigerator at my office and came across a small cardboard box, stained with juice and lunch items. This box contained carnivorous plant seeds collected in 1979! Yes, that is not a typo, the seeds have been rattling from refrigerator to refrigerator for 22 years. I pondered whether I should just toss the box in the trash, but I got the urge to plant stuff.

Feeling a bit foolish about wasting my time, I started with 100 ancient *Drosophyllum lusitanicum* seeds I had harvested from parent plants in 1979. I lightly scarified them with 180-grit sand paper until I had just rubbed through the seed coat. After soaking them in water overnight, on March 25 I placed them on the surface of vermiculite in a small plastic pot, uncovered, in my unheated greenhouse. Each day I sprayed the surface with water until the bottom of the pot began to drip. Nighttime temperatures dropped to 33°F, daytime temperatures reached about 75°F. Thirteen days later (April 7), these old seeds began germinating! By April 29, 25 of the 100 *Drosophyllum* seeds had germinated. By the end of May, 95 seeds (95%) had germinated.

Included in that box from 1979 was a packet of *Byblis gigantea* seeds. On March 25, I sprinkled the *Byblis* seeds on the surface of a wet mixture of equal parts Canadian milled sphagnum peat and silica sand. Two days later, I burned a hand-full of dry grass on the surface of the pot. On April 29, the *Byblis gigantea* seeds started to germinate. The germination was restricted to one part of the pot, which might be related to some pattern of concentration of the fire or smoke. None of the various *Drosera* seeds in the box germinated.

Reports of seed longevity are not unusual, particularly for those seeds that require some form of treatment to break dormancy, such as scarification or fire. However, I am not aware of reports (published or otherwise) of the long-term viability of carnivorous plant seeds.

Literature Reviews

By Jan Schlauer

Halda, J.J., Heřtus, P., and Malina, M. 2007. Několik nových bolívijských rostlin—Some new Bolivian plants. Acta Musei Richnoviensis 14, 105-126. (Czech, English, Latin descriptions)

In this paper (pp.110-115), a new butterwort, *Pinguicula jarmilae*, is described from the Andes in Chuquisaca Dept., Bolivia. The flowers are similar (small, short spur) to those of the other Andine-Antarctic species (sect. *Ampullipalatum*) and especially of *P. involuta*, which is known from Peru and Bolivia, but the leaves are rather large (as in *P. elongata*), and the plants are stoloniferous (which appears to be unique in this group). (JS)

Hu, G.-W., Long, C.-L., and Liu, K.-M. 2007. *Utricularia mangshanensis* (Lentibulariaceae), a new species from Hunan, China, Annales Botanici Fennici 44: 389-392.

The new species described in this paper is a remarkable relative of *U. peranomala* (likewise from China), and its discovery doubles the species count of section *Kamienskia*. The main differences from *U. peranomala* are the deeply pinnatisect foliar organs (entire with slightly wavy margins in *U. peranomala*), the bracts and bracteoles are not connate, and the corolla is white with a yellow dot on the palate in *U. mangshanensis* (yellowish in *U. peranomala*). Unfortunately, no seeds are known from the new species. (JS)