

Literature Review

Barker, Nancy G. and G. Bruce Williamson, 1988. Effects of a winter fire on *Sarracenia alata* and *S. psittacina*. Amer. J. Bot. 75:138-143.

Prescribed winter burning of a Louisiana savanna containing these two species showed an increase in foliage the following growth year. There was an increase of leaves in *S. alata* and of ground cover in *S. psittacina*. There was also greater seedling activity of *S. alata*. The gain of foliage of *S. alata* in burned plots was less than the loss in unburned plots, just the opposite of the cover with *S. psittacina*. **Summer** burns did not have a positive effect. There was little change in flowering rate the first year after winter burn. DES.

CASPER, S. Jost. 1987. On *Pinguicula lignicola*, an epiphytic heterophyllic member of the Lentibulariaceae in Cuba. Pl. Syst. Evol. 155:349-354.

This short paper reviews the morphology and some of the growth habit and habitat of this epiphytic butterwort. The plant grows on trunks and limbs of *Pinus* spp. along streams, measures about 2.0 cm. across when mature, and has blue flowers. The species exhibits heterophylly as well—that is, seasonal variation in leaf shape and variation between mature and immature plant leaves. Special root modifications allow the epiphytic habit. This species is compared to a similar one from Espanola with lighter flowers and lesser heterophylly. The article includes good photos and line drawings. DES

Govus, Thomas E. 1987. The occurrence of *Sarracenia oreophila* (Kearney) Wherry in the blue ridge province of southwestern North Carolina. Castanea 52:310-311.

Two populations of *S. oreophila* have been located in Clay County, NC. It should be noted that this county is immediately adjacent to Towns County, Georgia. It represents a first for North Carolina because of the political State boundary, but the locations are in the area of the same TVA impoundment (Lake Chatuge) as the Towns County location.

One of the populations has less than a dozen plants and is heavily grazed. The property owner indicated that there were more plants at one time. Observers feel that this site is quite tenuous and may soon disappear. The second site is as large as known populations (0.2 hectare) and while recently cleared, grazed and ditched, seems to be in healthier condition. The newly opened area resulting from bulldozing seems to have stimulated heavier growth. Protection of this site is being sought actively. DES

Stauffer, R.E. 1985 (issued 1987). Cytochemical tests of acid phosphatase secretion by carnivorous plants. Proc. Rochester Acad. Sci. 15:181-185.

Using the substrate Naphthol Phosphate for specific cytochemical staining, and Phenolphthalein Diphosphate as a screening test in test tubes of tissues, the author studied the presence and location of acid phosphatase activity in *Sarracenia purpurea* ssp. *gibbosa* (sic), *S. flava*, *Utricularia cornuta*, *U. minor* and *U. vulgaris*. He found intense activity in glands, including nectar attractant glands on the exterior of pitcher plants. There was a faint staining of all other tissues, indicating the wide distribution of the enzyme even though most concentrated in glands. Acid phosphatase activity has been considered as a possible marker for digestive gland activity, but in this editor's opinion, Stauffer's results (internal glands of *S. purpurea* and external glands of nectar attractant type) casts doubt upon digestive specificity. DES