Acoraceae C. Agardh.

Sweet-flag Family

**Herbs** perennial, aquatic. **Rhizome** horizontal, creeping at or near surface, branched, with aromatic oil. **Stem** prostrate, branched. **Leaves** not differentiated into petiole and blade, equitant, linear, venation parallel along the length of the leaf. **Inflorescences** spadices, from 3 angled nearly cylindrical axis tapering to an obtuse apex; peduncle fused with proximal portion of sympodial leaf that extends beyond spadix, true spathe absent. **Flowers** bisexual, tepals 6, stamens 6, distinct; ovary with 3-locular, sometimes 1-locular, sessile; stigma sessile, styles small and appearing absent. **Fruits** berries with thin almost leathery pericarp. **Seeds** 1-6.

3-6 species.

1 species in Oregon.

Native in temperate northern hemisphere and tropical Asia at higher elevation; introduced in southern hemisphere.

Based on morphological and molecular evidence Acoraceae is now treated as a separate family from Araceae. The same evidence also suggests that the Acoraceae is the oldest extant family of monocotyledons (Grayum 1987; Duvall et al. 1993).

*Acorus* L.

**Herbs** aromatic, particularly in rhizomes. **Leaves** bright green with 1-6 prominent veins and sheathing at base. **Inflorescences**: a solidary spadix arising from a sympodial leaf. **Flowers**: with brownish tepals, yellow anthers and green ovaries. **Fruits** oblong, broader at apex, brown to reddish, longitudinally striped.

3-6 species.

1 species in Oregon.

Native in temperate northern hemisphere and tropical Asia at higher elevations; introduced in southern hemisphere.

There are two species of *Acorus* in North America, *A. calamus* and *A. americanus*. Traditionally these species were collectively cited as a singular species, *A. calamus*. Current taxonomy, however, treats all fertile North American plants as *Acorus americanus* and presumes they are native. Putatively introduced, sterile triploids are referred to as *A. calamus* (Thompson 1995). Further study to clarify the taxonomy and biogeography of this genus is in order.

*Acorus calamus* L.
Sweet flag

Leaves basally white with pink or red, otherwise bright green; a single prominent midvein. Vegetative leaves up to 1.75 m long, 2-65 cm wide at base, 32-95 cm wide distally; occasionally margin undulate or crisped. Sympodial leaves 30-160 cm long, usually equal to vegetative leaves, base 16-75 cm wide, distal portion after inflorescence 13-90 x 0.4-2 cm. Inflorescences 10-16 cm long, 12-22 mm wide. Flowers 3-4 mm wide; pollen not staining in alkaline blue. Fruits not produced in North American plants.

Wet areas, mashes, swamps or swales; often found on gravel beds.

Mari, Unio, Wall; CA; disjunct populations in western United States, widespread in Eastern United States.

The sterile *A. calamus* in N. America tends to be larger than the North American native *A. americanus* (found in the northern United States and Canada). *Acorus americanus* is also distinguished from *A. calamus* by producing fruit, pollen staining in aniline blue and the presence of multiple prominent veins on the leaves.

The ethnobotanical uses of *A. calamus* is many. The root stock has and continues to be used as a flavoring agent, a candy, a breath sweetener, a toothache treatment, and to increase appetite and aid in digestion. Calamus oil is used for flavoring beer, gin and bitters and also in perfumes and as a moth repellent.

Literature cited:

