
Solitary or in small tufts, the base hard, often fibrous, perennating by both terminal and lateral overwintering buds. Leaves broadly linear, spreading, 10.0-40.0 cm. long, 0.3-2.0 cm. broad (tending to be more ascending and linear-leaved on heavier soils), a dark and lustrous green above the equitant portion (ca. 2/3 the total leaf length), the basal, equitant portion stramineous, brownish, or pinkish, narrowing more or less gradually to and abrupt, slightly incurved, tip. Surface of the leaves smooth or slightly papillose; margin of the leaves papillose, rarely harshly scabrous. Sheathes of the scapes from 1/3 to nearly as long as the principal leaves, rather loosely investing the scape save for a distal, blade-like portion, the margins of which converge to form a short (ca. 2 mm.) tip; bases of the sheathes usually lustrous, stramineous to castaneous. Scape (15-)70-100 cm. long, twisted but rarely flexuous, many-ribbed below, becoming flattened and 2-edged above. Spikes at seed bearing time ellipsoidal to lance-ovoid, 1.0-3.0 cm. long, of many tightly imbricated bracts. Fertile bracts broadly obovate or suborbicular, 5.0-8.0 mm. long, not keeled, the apex rounded, the exposed margin subentire or erose with age, the matrix reddish-brown or pale brown, the dorsal area roughly rectangular, olive to dark brown. Lateral sepals included, curvate, a dark lustrous brown, the thickened keel nearly as broad as the sepal sides, ciliate-scabrid. Petal blades yellow, obovate, ca. 8 mm. long, unfolding in morning. Seeds ellipsoidal to broadly ovoid, caudate at one end, 0.5-0.6 mm. long, lustrous with 20-22 distinct, papillose longitudinal lines and several faint cross lines.

Moist sands or sandy-peats of bog margins, savannas, pine flatwoods, lakeshores and roadside ditches, Coastal Plain, Virginia south into Florida and west to eastern Texas.

Type. U.S.A. GEORGIA: “Margins of swamps, Georgia”; collected by Beyrich. I have never seen this type but understand that it was destroyed during the air raids of Berlin. A neotype is hereby designated: U.S.A. FLORIDA. LIBERTY CO.: 2 mi. n. Sumatra; black sandy peat of grass-sedge, longleaf pine savanna, Kral 15694; deposited at SMU, isotypes at: BM, DUKE, FSU, GH, IA, ISC, K, MICH, NCSC, NY, PH, RSA, UC, US, USF, USL, VDB.

Habitat and Identification. X. ambigua is perhaps the most abundant of all the Xyris which frequent the huge expanses of savanna or grass-sedge bog so common to the Gulf and Atlantic Coastal Plain. As a rule it is not found in sites where its bases would be submersed for any

(Opposite) 1. Xyris ambigua. 2. X. stricta.
length of time. It is to be looked for along the upper edges of wet places and in association with such other *Xyris* as *X. flabelliformis*, *X. brevifolia*, *X. elliotti*, *X. caroliniana*, therefore it is above the wetter situations occupied by *X. iridifolia*, *X. jimbrata*, *X. smalliana*, *X. jupicai*, *X. difformis*, *X. serotina*, *X. stricta*.

*X. ambiguia* is closest in its external appearance to *X. stricta*, but the bases of the latter are invariably darkly pigmented, the leaves narrower and more ascending, the scape broader and flatter, the spike oblong. While the petal blades of *X. ambiguia* are obovate, nearly 1 cm. long, and open in the morning, those of *X. stricta* are cuneate, about 0.5 cm. long or less, and open about midday. *X. ambiguia* appears to develop two forms to the west in Mississippi, Louisiana, and eastern Texas; one form has a large stature and appears the same as the eastern plant while the other has more maroon pigmentation of leaf bases and is a much smaller plant with smaller flowers. Both forms may cohabit a single area and the difference between them is therefore quite striking.

A very good means of field identification of this species consists of stripping the outer, often fibrous, leaf bases away and examining the surfaces of the bases of the inner leaves. Here, very prominent, dark, longitudinal veins are evident in sharp contrast to the white or pale intervening tissue.

This species often takes two years to reach flowering size. Seedlings are very similar to *X. flabelliformis* in appearance, being short, flabel-lately spreading, curvate and maroon-based.

8. **XYRIS STRICTA** Chapm., Fl. S. U.S. 500. 1860. (Figs. p. 228).

Tufted, usually in large, rigid-leaved, clumps, whose brown, fibrous bases are set on muck or wet sand in shallow water. Leaves narrowly linear, (15-) 20-50 cm. long, 2-5 mm. broad, gradually tapering to a slender, incurved tip, green above the equitant portion (rarely maroon), but reddish-brown or maroon toward the base (old leaves are very often persistent as brown, almost black scales or shreds); margins tuberculate or papillate, incrassate; surfaces smooth, very rarely papillate. Sheathes of the scapes shorter than the leaves, tight and brownish or castaneous below, becoming maroon or green toward the oblique, short-bladed orifice. Scapes linear, (40-) 45-85 cm. long, roundish toward the base, with a few low, tuberculate, spiral ridges, definitely flattened above toward the spike, the two marginal ridges papillate or tuberculate, sometimes accompanied by 2-4 lower ridges between the margins. Spikes oblong, narrowly ellipsoidal or lance-ovoid, 1.0-2.0 (-2.5) cm. long, blunt, of very many, tightly imbricate scales. Fertile bracts suborbicular, ca. 5-6 mm. long, the outer surface castaneous save for the greenish, rectangular dorsal area, the margins entire. Lateral sepals curvate, about the length of the bracts, a lustrous reddish brown, the wings broad and thin, the keel thicker and ciliate from base to apex. Blades of petals cuneate 3.0-3.5 mm. long, yellow, unfolding in the late morning, closing