tapering into an awn as long or longer than the body: flowering glumes 4-7 lines long, nearly smooth to hirsute, bearing a slender scabrous awn, 1-2 inches long. On river banks and bars, Oregon to Nova Scotia, Georgia and Texas.

E. CAPUT-MEDUSE L. Sp. 84. Stems slender 12-20 inches long, geniculate below: sheaths about equalling the internodes: ligules very short: leaves 2-3 inches long, involute: spike stout, 1½-2 inches long, dense: spikelets 1-2-flowered: empty glumes narrow, rough, spreading, about an inch long: flowering glumes hispid, 3-4 lines long, gradually tapering into an awn 2-2½ inches long. On dry prairies, southwestern Oregon: introduced from Europe.

## 55 SITANION Raf.

Tall annual or perennial grasses with usually flat leaves and terminal spikes. Spikelets 1- to several-flowered, sessile, usually in pairs in alternate notches of the pointed rachis. Empty glumes forming an apparent involucre to the cluster: glumes very long, often 2-parted to the base, the divisions unequal, 2-cleft and long-awned: flowering glumes long-awned, 2-toothed or 3-awned. Palets a little shorter than the glumes, 2-keeled. Stamens 3. Styles very short, distinct, with plumose stigmas. Grain sparsely hairy at the summit, adherent to the palet.

S. elymoldes Raf. Journ. Phys. lxxxix, 103. Elymus Sitanion Shultes. Stems simple smooth, 6-24 inches high: sheaths smooth to rough or hirsute, usually shorter than the internodes, the upper ones often inflated and enclosing the base of the spike: ligules short: leaves 2-7 inches long, ½-2 lines wide, usually scabrous, sometimes hirsute, flat or involute; spike 2-6 inches long: spikelets 1-5-flowered: empty glumes entire or divided, often to the base, the divisions subulate and bearing long unequal slender awns: flowering glumes 3-5 lines long, 5-nerved, scabrous toward the apex, bearing a long slender divergent awn 1-3 inches long. In dry soil, California to Brit. Columbia and Kansas.

S. glaber J. G. Smith. Stems stout, erect, densely cespitose, 12-20 inches high: sheaths loose, longer than the internodes, glabrous: leaves 2-6 inches long, glabrous beneath: spikes 2-4 inches long, barely exserted: awns of the flowering glumes 2-2½ inches long. Washington to California.

S. villosum J. G. Smith. Stems stout, mostly erect, 10-15 inches high: sheaths densely hirsute: leaves short, flat, strigose-pubescent and somewhat hirsute: spike 3-4 inches long, enclosed in the upper sheath: empty glumes 3-8-parted, each part bearing a slender awn 2-4 inches long; flowering glume lancevlate, 3-awned, the middle awn stout, 4-5 inches long, the lateral ones slender and usually shorter. Common in dry ground about Pulman, Washington.

S. Leckenbyl Piper Fl. Palouse Reg. 32. Stems stout, erect,  $2\frac{1}{2}$ -3 feet high: sheaths glabrous or on sterile shoots ciliate: leaves stiff, erect, 2-7 inches long, involute glabrous beneath, strigose above, sharply acuminate: spike 5-7 inches long, slender,usually erect, long-exserted: empty glumes 4, equal,  $2\frac{1}{2}$ -3 lines long, entire, setaceous: flowering glumes lanceolate, 5-6 lines long, smooth, at base, scabrous above, bifid at the apex and tipped with a straight awn  $1\frac{1}{2}$ -2 inches long. Bars of Snake river at Wawawai, Washington.

S. flexuosum Piper l. c. Stems tufted 1½-3 feet high, erect: sheaths glabrous or on sterile shoots villous: leaves 2-6 inches long, involute, strigose-pubescent on both sides, or the upper nearly smooth: spike slender, erect, 4 inches long, long-exserted: empty glumes subulate-setaceous, 1-2

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