

erling glumes  
scabrous awn:  
Georgia

s long, genic-  
s very short:  
dense: spike-  
about an inch  
pering into an  
n: introduced

leaves and  
e, usually in  
empty glumes  
s very long,  
2-cleft and  
or 3-awned.  
Stamens 3.  
rain sparsely

anion *Shultes*.  
ugh or hirsute,  
n inflated and  
ches long,  $\frac{1}{2}$ -2  
lute; spike 2-6  
divided, often  
slender awns:  
the apex, bear-  
1, California to

capitose, 12-20  
abrous: leaves  
arely exserted:  
n to California.  
5 inches high:  
cent and some-  
sheath: empty  
ches long; flow-  
5 inches long,  
in dry ground

, erect,  $2\frac{1}{2}$ -3  
es stiff, erect,  
sharply acu-  
serted: empty  
ng glumes lan-  
id at the apex  
Snake river at

erect: sheaths  
long, involute,  
spike slender,  
setaceous, 1-2

lines long, tipped with an awn 5-6 lines long, sometimes with 2 very short lateral awns: flowering glumes lanceolate, smooth at the base, scabrous above, bifid, bearing a divergent awn  $1\frac{1}{2}$ -2 inches long. Bars of Snake river at Wawawai, Washington.

**S. Brodiaei** Piper l. c. Stems erect,  $1\frac{1}{2}$ -2 feet high: leaves stiff, smooth on both sides, involute, 5-7 inches long: spike pale green, long-exserted, erect,  $2\frac{1}{2}$ -3 $\frac{1}{4}$  inches long: empty glumes subulate, entire, 4 lines long, bearing an awn 6 lines long: flowering glumes lanceolate, densely appressed-pubescent, 6 lines long, rarely with 2 short lateral awns. Bishop's Bar, Snake river, Washington.

## CLASS 2, GYMNOSPERMÆ.

Monœcious or diœcious trees or shrubs, mostly evergreen, with usually rigid needle-like, subulate, or scale-like leaves. Ovules naked upon a scale, bract or disk, or within a more or less open perianth.

### SYNOPTICAL KEY.

**110 Taxaceæ** Dioecious evergreens: flowers solitary and axillary: ovule solitary, in fruit a bony seed within a fleshy envelope or cup-shaped disk.

**111 Pinaceæ** Mostly monoecious and evergreen trees or shrubs: staminate flowers in aments: pistillate flowers in scaly aments becoming cones or berry-like, ovules 2 or more at the base of each scale.

### ORDER 110 TAXACEÆ Lindl. Nat. Syst. ed. 2, §16.

Sparingly resinous trees or shrubs with scattered, in ours evergreen, linear leaves spreading in 2 ranks and dioecious axillary and solitary flowers achlamydeous and naked or surrounded by the imbricated and usually decussate bud-scales. Staminate flowers with the filaments monadelphous in a column, each filament surmounted by several more or less united pendent anther-cells, dehiscing longitudinally on the lower side. Pollen globose. Pistillate flowers of a solitary orthotropous ovule which in fruit becomes a bony-coated seed raised upon or more or less surrounded by or consolidated with a fleshy disk, cup or other coating. Embryo axile, in fleshy or farinaceous albumen. Cotyledons only 2, semiterete.

#### 1 TAXUS L. Sp. 1040.

Trees or shrubs with evergreen spirally arranged short-pointed linear flat mucronate leaves, spreading so as to appear 2-ranked, and axillary and solitary sessile or subsessile very small aments. Staminate aments consisting of a few scaly bracts and 5-8 stamens, their filaments united to the middle: anthers 4-6-celled. Ovules solitary, axillary, erect, subtended by a fleshy annular disk, which is bracted at the base. Fruit consisting of the fleshy disk which becomes cup-shaped, red and nearly encloses the bony seed.

**T. brevifolia** Nutt. *Sylva* iii, 86 t. 108. A tree 20-90 feet high, by