

Prepared by Jerry Copeland, copyrighted 2012

For the state of COLORADO

This key requires the use of a microscope that has a function to make measurements of the field of vision.

NOTE: some exceptions may occur within the four major classes though the species sought ought be confined to the major class.

The basic definitions are:

ADNATE: base of leaf attached directly to stem

DECURRENT: base of leaf grows along the stem

CUNEATE: a wedge shaped growth of the leaf base along the stem.

Measurements of the strobili should probably be done with the strobilus removed from the plant stem and laid horizontally before viewing and measuring. Ideally the strobilus should be fully matured as immature strobili will be smaller.

The measurements given in the key represent the range of length or width of the plant structure so noted.

Generally the measurement of length is from the tip to the observable or determinable base of the structure.

For the strobili, measurement of length is roughly from the base of the strobilus to the tip of uppermost sporophyll.

Adnation is generally represented as a green leaf base that is attached to a darker colored stem.

SELAGINELLA: TETRAGONOSTACHYS: KEY TO LEAF BRISTLES 1.6 mm TO 2.0 mm

1. Leaf bases decurrent with strobili from 0.5 cm to 4.0 cm long

S. densa

SELAGINELLA: TETRAGONOSTACHYS: KEY TO LEAF BRISTLES 1.1 mm TO 1.5 mm

1. Leaf bases decurrent, including cuneate, only, with strobili from 0.5 cm to 4.0 cm long

A. Leaf bristle with conspicuous pubescence (puberulent), 1-1.9 mm long

S. densa

B. Leaf bristle generally smooth to slightly pubescent, 0.4-1.25 mm long

S. standleyi

2. Leaf bases both adnate and decurrent, including cuneate, with strobili from 0.5 cm to 4.0 cm long

A. Leaf bristle smooth or with a few teeth, 0.5-1.1 mm long

S. scopulorum

SELAGINELLA: TETRAGONOSTACHYS: KEY TO LEAF BRISTLES 0.5 mm TO 1.0 mm

1. Leaf bases decurrent, including cuneate, only

A. Leaf bristle generally smooth to slightly pubescent, 0.4-1.25 mm long

S. standleyi

2. Leaf bases both adnate and decurrent, including cuneate

A. Leaf bristle smooth or with a few teeth

1. Leaves same size all around main stems , 2-3.4 mm long, leaf bristle 0.25-1.0 mm long

S. underwoodii

2. Leaves distinctly longer on underside of main stems, 2.5-4 mm, leaf bristle 0.5-1.1 mm long

S. scopulorum

SELAGINELLA: TETRAGONOSTACHYS: KEY TO LEAF BRISTLES under 0.5 mm

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|---|------------------------|
| 1. Leaf bases adnate only, with leaves of main stem 1-2 mm long, leaf bristle 0.06-0.45 mm long | <i>S. mutica</i> |
| 2. Leaf bases decurrent, including cuneate, only, with leaves of main stem 2.5-4.5 mm long, leaf bristle 0.4-1.25 mm long | <i>S. standleyi</i> |
| 3. Leaf bases both adnate and decurrent, including cuneate | |
| A. Rhizophores found along creeping stems, with leaves 2.0-3.4 mm long, leaf bristle 0.25-1.0 mm long | <i>S. underwoodii</i> |
| B. Rhizophores found on lower half of aerial stems, with leaves 1.7-2.4 mm long, leaf bristle 0.3-0.6 mm long | <i>S. weatherbiana</i> |
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