

# Selaginella

Q Describe the systematic position, occurrence and morphological feature of sporophyte of SELAGINELLA ?

## Systematic Position →

Division - LycopHYta  
Class - LycopSIDA or GLOSSOPSIDA  
Order - Selaginellales  
Family - Selaginellaceae  
Genus - Selaginella

Occurrence (Habitat) → Selaginella is commonly called "Little club moss" or "spike moss" is widely distributed. It includes about 700 species, out of that 71 species reported from India. Selaginella flourishes well in the humid and shady places in the tropical rain forest though it may also occur in temperate region. A few species are xerophytic, *S. nightingale* and *S. selaginella* are common Indian xerophytic plant. *S. odunca*, *S. biformis*, *S. macrospora* are the common himalayan species. These species roll up into compact ball like structure when condition is dry and may resume the normal life again when the condition is moist.

Sporophyte of the plant → The adult plant is an evergreen, delicate herbaceous, root are short lived and are adventitious. Plant body may be either prostrate, subaerial, scandent, erect, delicate and climbing with the help of rhizoids. The length of the plant body varies from 10 to 15 cm to several meter. Plants are mostly perennial but a few are annual. Whole surface of the stem is covered by leaf and stem is



dicotomously branched.

In the plant as a whole it divides into leaf, stem, rhizophore and root and some legule.

In *Selaginella* the leaves are triangular and pointed at the apex. Measuring a few mm in length. They are lanceolate or ovate in shape. Each leaf bears a flap like out growth on the adaxial surface close to its base which is called legule. Legule assumes different shaped in different species and its function is uncertain though it is known that legule is a secretory structure which secretes water and mucilage substance to keep the sporangium and young developing leaf moist.

The stem is various nature in habits of the plant. They are herbaceous, green or reddish, dorsiventral, glabrous, smooth, rarely unicellular hairs are present branched. The length varies from a few cm to a few meter. Very rare stem is unbranched. Some outgrowth takes place in the stem is known as rhizophore.

Rhizophore is a leafless root like structure which grows from the stem and geotropic in nature. It is usually solitary. It enters into the soil and absorbs moisture like root. They also helps in climbing the plants. This is the important character of the *Selaginella* plant. We can recognize the *Selaginella* plant with the help of rhizophore.

Some adventitious roots originates from the nodal region of the stem or from the rhizophores or from the swollen base of hypocotyle (*S. Selaginoids*).



Roots are dichotomously branched. They have root hairs and root cap also which helps in anchorage the plant and absorption of moisture.

