Collectors Corner Fact Sheet

Tillandsia – Living Air Plants



Tillandsias belong to the family of plants called bromeliads. They have evolved into a remarkable genus adapting to a wide range of conditions with the amazing ability of being able to capture all water and nutrients via small scales on the leaf surface rather than through roots. There are close to 600 species and many more varieties of tillandsias to choose from in a huge range of sizes with some having startling flowers. Tillandsias have evolved as a group of plants that have adapted to grow in a remarkably wide range of habitats from inhospitable deserts to tropical rainforests. They are true masters of their environment and they are highly adaptable so have filled a niche in nature that no other plant is capable of filling.

Tillandsias grow in a wide variety of places such as tree branches, electrical power lines, rocks and cliff faces, and

on larger cacti varieties. The dandelion like seeds are carried by the wind and begin to grow on any surface they can attach their roots to. These roots are used primarily to secure themselves to their host and are rarely use for water or nutrients. Instead, tillandsias have developed scales on their leaves that absorb most, if not all, of their food + water. The scales on tillandsias from arid environments are so large that the plants appear grey or even silver.

A simple guide to the determining a tillandsias requirements is by the nature of the leaves or base. Thick hard silver leaves and thick or dense bases generally mean that the plant is from a very exposed and dry environment. Finer or softer silver leafed varieties are from exposed positions with a higher rainfall and the greener varieties without obvious scales are from shaded conditions generally with a higher rainfall.

Most tillandsias grow to between 3cm to 20cm with some larger specimens to 1 meter. Maturity (flowering) may take 5 to 20 years from seed depending on species. A mature plant usually produces 4 to 20 flowers over a few months. The inflorescence (flower sheath) of some species is quite spectacular and long lasting. A mature plant may produce many offsets forming a dense clump after a few years. These offsets can be removed when about 1/2 grown to start new plants.

Easiest species for beginners are Tillandsia fuchsia v gracilis (argentea),

Tillandsia ionantha varieties and Tillandsia usneoides or Spanish moss as it is commonly called. Spanish Moss can hung on anything and be kept in any sheltered position with very little care. North of Sydney it will grow in the trees in the garden.

Location Tillandsias due their structure and tolerance to a wide range of conditions can be grown well in most parts of Australia. Tillandsias ideal environment for the hobby grower is outdoors under partially shaded conditions. In the colder states the plants will require

protection from winter rains and frost so undercover areas with sufficient light will do very well. Only a few varieties need any winter heating and most adapt to the cold if planted out in the warmer months. Bright indoor positions near windows can produce good results, avoid very hot positions.

Mounting Tillandsias can be attached to objects with the use of plastic coated wire, tie wire, fishing line, hot melt glues, nails or any non toxic glues like PVA or Gelgrip. Do not use uncoated copper wire, galvanised products, treated timbers and any glue that has a strong odour when drying as Tillandsias absorb the toxic materials from these products into their cells. A few novel ways to grow Tillandsias are tied to a fishing line and hanging in the air, attached to doors, door frames, and posts, glued to window glass or on window sill or any well lit area the imagination will allow.

Watering Tillandsias require regular watering as they cannot absorb water like normal plants and rely only on the water stored in their leaves. Water can be applied by hose, watering can, mist spray bottle or dunking. In all cases a thorough soaking is required to sufficiently fill the cells of the plant. Water is lost by the plant through transpiration which is governed by sun, heat and relative humidity therefore in a hot sunny dry position the plant may need watering every 1 to 3 days. In a dark cold moist area watering every 2 to 4 weeks may be sufficient. Tillandsias should be allowed to almost dry out between waterings. It is easy to tell if the plant is being watered sufficiently as the leaves should be firm and erect and will soften, shrink or appear limp if underwatered, where the leaves connect to the base the plant should be firm and stiff. Tillandsias may survive months of neglect and long periods with little water and still recover. A very weak dose of plant food in the water monthly will speed up the growth of the plants.

Tillandsias are a must for any lover of plants and deserve a place in anyone's collection.

