

Pinguicula

The Butterworts

The Latin name for this genus derives from the root *Pinguis* meaning fat or greasy and refers to the leaves which are covered in a greasy mucus. This mucus traps small flying or ground dwelling insects and they can be used as a very effective biological control for whitefly. The range of this genus is large and they occur in Northern and Southern Europe, almost all of North America, Mexico and Guatemala and some parts of Southern America.

For cultivation purposes the genus can be divided into several sections.

Mexican species: Most species grow on alkaline soils out of direct sunlight and in cultivation they do well on an open mix of perlite, vermiculite and a little peat. A little fine calcareous material such as limestone or tufa can be added with beneficial effect. Most but not all species from this region have two distinct seasonal growth forms. In the summer insect trapping leaves are formed. In the winter these die back and various forms of tight rosettes of non-carnivorous leaves are formed with a variety of different growth forms depending on species. During this time watering needs to be completely stopped allowing the soil to dry out. At other times water from above but do not allow the plants to stand in water permanently. Minimum winter temperature is 5°C



Pinguicula alpina

Photo—Stewart McPherson



Pinguicula lusitanica - Blackdown Hills, Somerset

Photo—Tim Bailey

North American Species: These produce carnivorous leaves all year round but during the winter months watering should be reduced. Some species like a very high water table, whereas other prefer less water. At least one species produces small plantlets on the leaves and this can be a very easy way to produce new plants. Minimum winter temperature is 5°C

Temperate Species: Most species produce a carnivorous rosette during the growing season and then form a resting bud in for the winter months. There are three species native to the British Isles and several more species that occur in southern and central Europe, often though not exclusively in montane regions. Most but not all are hardy.

Both the European and N. American species do well in a compost consisting of three parts by volume peat to one part sand. Coir may be a potential alternative or part substitute to peat for *Pinguicula*, and has been used successfully by some growers on some species (see "Growing without Peat" Care Sheet). Watering is by the tray system, with the pots standing in a few centimetres of water during the summer months. During the winter dormancy the compost should be kept moist.

Propagation can be by a variety of methods depending on the species. All can be propagated by seed though the flowers designed to avoid self pollination so need to be pollinated by hand. Seed is sown on a soil suitable for the species and left uncovered. Germination can be quick or slow depending on the species.

Mexican species in particular grow very well from leaf cuttings and the hibernacula forming species can be divided at the time of dormancy. In addition small scale-like gemmae are produced around the hibernacula of mature plants. These can be separated during dormancy and potted up to grow on.