

Growing foliage-Vrieseas successfully – summary of presentation

- **RULE OF THUMB NO. 1** Look at the natural habitat of species as a guide. This can also help if you know the parentage of hybrids down to species level. See table on next slide.
- **RULE OF THUMB NO. 2** Speak to local collectors who are growing Vrieseas, both successfully and unsuccessfully. Visit them, see what they grow and how they grow it. Look at their results they are getting and discuss what they think is working well and what could be done better

Climatic preferences of species

Species	Cool preference	Intermediate preference	Tropical preference	Not fussy
altodaserrae	X	X		
bituminosa	X	X		
fenestralis		X	X	
fosteriana	X	X	X	X
gigantea	X	X		
gigantea var. seideliana (Nova)		X	X	
hieroglyphica	X	X		
pastuchoffiana		X		
platynema	X	X		
Goudaea ospinae var. gruberi		X	X	

Climate preferences of hybrids

Origin	Cool preference	Intermediate preference	Tropical preference	Not fussy
Hawaiian origin (Shiigi, Fell)		X	X	
Californian origin (Arden)	X	X	X	X
New Zealand origin (Maloy, Coyle, Mitchell)	X	X		
New South Wales origin (Koning, Harper)	X	X	X	X
Queensland origin (Stamatis)	X	X	X	X
Hybrids with day-flowering species in their ancestry	X	X	X	X

Light and shade cloth selection – talk to your local growers about what they use

Temperature – most enjoy some evening cooling off. Sprinkle in late afternoon during hot, dry summers to help plants recover from the heat of the day. Optimal active growth occurs during autumn, winter and spring. Growth slows down considerably if summers are dominated by heatwaves and drought. If summer has good rainfall then growth continues actively. Heat damage will occur during heatwaves. Extra shading and afternoon sprinkles will help minimise this.

Water – clean, soft water is best. Soft water = water that is low in dissolved minerals. Rainwater is the very best. Reverse osmosis water is good too, but too costly and impractical for most. Bore water can be problematic if hard or salty. Town water can cause serious problems depending on where you are located. Water from dams and creeks may contain pathogens and require treatment.

Watering serves 2 purposes – 1) rehydration, and 2) maintaining healthy temperature

Use sprinklers that are low-output – will take longer to water plants properly but plants will remain wet and cool for longer which allows for better recovery from hot days

Feeding

Initial feeding is for establishment – use something with a constant release rate that lasts 12 – 14 months, plus some organic extra

Ongoing feeding is for plants that have a very long lifespan. It needs to be very light and is purely to keep plants healthy. Don't overdo or you will lose colour.

Potting mix

Needs to be open with big air spaces. Must be free-draining but still hold moisture. Speak to your local growers about what they use.

Pests and diseases

Name of pest / disease	Cause	Severity of impact	Solution
Crown rot	Water quality	Very severe	Prevention. Use good water.
Crown rot	<i>Phytophthora, Fusarium, Pythium</i> , etc. living in water supply OR splashes from infected plants OR contact with infected soil	Very severe	Prevention. If using water from a dam, river or creek treat it properly first. Grow plants on benches off the ground. Isolate infected plants.
Soft brown scale	Plants too crowded. Lack of maintenance. Introduction of pest through infected plants, wind, birds, mammals, on clothes, or ants.	Usually very minor.	Prevention with good maintenance. Treatment is very easy with Confidor or Crown.
Black scale / flyspeck		Can be minor to severe, depending on how early you deal with it.	Prevention with good maintenance. Only 100% effective treatment is with Dimethoate. Dipping regime.
Mealybug		Can be minor to severe.	Prevention with good maintenance. Bifenthrin for ants. Confidor or crown for mealybugs.

Tillandsia xerographica and its hybrids

Native to Central America (Southern Mexico, El Salvador, Guatemala, Honduras)

Semi-arid climates in thorn-scrub. Epiphytic. Constantly warm and humid. Low rainfall. Reproduces from seed and offsets. Mainly reproduces from seed in the wild. Threatened with extinction (habitat destruction and collection).

Most xerographicas in cultivation worldwide are either of the Mexican or Guatemalan type. These are the easiest to grow. The tomasellii and kruseana types are very rare and not for beginners.

Cultivation

Avoid cold + wet (cold and dry is fine, warm and wet is fine)

Rainwater best

Covered from rain is best

Mounted or potted in a very open mix

Feed well if outside the tropics. This helps with cold-hardiness

Propagation

Offsets are easiest. Can be left attached to mother (will be stronger and flower sooner) OR can be removed when one-third mature

Seeds - it takes at least 10 years to get mature plants from seed in cultivation. Keep seed pods protected from water or they will rot and abort. Seed pods take at least 12 months to ripen. Plant seeds on fibreglass insect mesh. Wet-dry cycle. Cover from rain. Feed seedlings with foliar feed from 3 months of age. Use different clones for pollination but keep provenance pure i.e. Mexican x Mexican, or Guatemalan x Guatemalan

Pests – the most common pest is thread scale. Easily treated with Confidor or Crown (dip or spray). Keep dosage low so plants not damaged.

Diseases – the most common is crown rot due to conditions being persistently wet, or due to bad water, or due to lack of protection from cold + wet conditions. Can be easily avoided by providing correct conditions. If rot occurs, tip out cup water, clean out rotten tissue, apply cinnamon and keep plant on its side. This allows you to water it but prevents any water accumulating. Plants may recover or produce offsets depending on how bad the rot is.

The hybrids

Many beautiful hybrids. Most are easy to grow under regular Tillandsia conditions. The only xerographica hybrids that can be touchy are:

Silver Queen – hates cold, especially cold and wet

Fireworks – the same as Silver Queen but a bit hardier