INDIGENOUS HOUSE PLANTS

The third in a series of articles on indigenous plants for indoors by **Ernst van Jaarsveld**, Kirstenbosch.

FERNS

Many indigenous ferns are used as house plants, the hardiest perhaps being the sevenweeks fern Rumohra adiantiflormis. Other suitable South African species are Adiantum capillusveneris, Tectaria gemmifera, Nephrolepis biserrata, Diplazium zanzibaricum, Polystichum pungens and Blechnum attenuatum. Stenochlaena tenuifolia has creeping stems and beautiful foliage.

Other creeping ferns are Microsorium scolopendrium, M. ensiforme, Oleandra distenta and Davallia chaerophylloides. The small Selaginella kraussiana has a moss-like appearance and could be



Adiantum poiretii is a hardy indigenous fern that adapts well to indoor conditions. Photo: E. van Jaarsveld.

used as a groundcover. Although there are no indigenous stag horn fern species in South Africa, two species occur in Mozambique (*Platycerium alcicorne* and P. elephatotis), but they are not as easy to grow as the common exotic Platycerium cultivar.

Coming from moist natural habitats, ferns require regular water and a moist atmosphere. Group them together as the moisture transpired by the plants increases the humidity around them. A popular way of increasing moisture is to stand the plants on a tray of wet pebbles. Mist-spraying with tepid water not only raises humidity, but cleans the leaves

too. A good quality peat-based soil will also help keep the plants moist. See *Veld & Flora* Dec, 1998, page 131 for Ernst's recommended potting soil.

CLIMBERS AND TRAILERS

The most common South African climbing house plants found worldwide are Ceropegia woodii (also known as the rosary vine), Senecio macroglossus and Rhoicissus rhomboidea. These are extremely hardy, and can be grown in containers or hanging baskets indoors or on stoeps. Ceropegia woodii has rounded succulent tubers from which the climbing or drooping stems and beautiful mottled fleshy leaves grow. They are very easy to propagate from cuttings. The small tubular flowers are also attractive. Senecio macroglossus (macro: large, glossa: tongue) has beautiful angular fleshy leaves and yellow daisy-like flowers. Variegated cultivars are also on the market. It is also easy to grow from cuttings. Rhoicissus rhomboidea is grown for its ornamental divided leaves. It also has tuberous roots, which makes the established plant quite drought resistant. R. tomentosa (formerly R. capensis) is also occasionally grown as a house plant

and its leaf shape varies in size and shape.

The black-eyed-Susan Thunbergia alata, although grown locally as a garden plant, is also frequently grown as an indoor potplant in Europe. The asparagus fern Asparagus plumosus with its climbing stems and fernlike leaves is also popular worldwide. Senecio bryoniifolius is a climber with great potential as a house plant. It has succulent rounded leaves and is drought resistant a good formula for a house plant. The climbing nettle Urera trinervis (formerly U. cameroonensis) has adventitious roots (roots that appear above the soil

The well-known rosary vine, Ceropegia woodii, is one of our more famous indigenous plants for indoors.

Photo: E. van Jaarsveld.

surface) that attach themselves to what the plant is climbing on (in its natural habitat, the bark of trees or rocks).



CURIOSITY CLIMBERS

Aaron's rod Tinospora fragosa is a fast growing climber from the bushveld regions in northern Mpumalanga and is occasionally grown as a house plant. It requires a warm sunny windowsill and ordinary potting soil. The plants are deciduous, and should not be watered from May until October when the new leaves appear. Aaron's rod has the amazing ability to drop a survival root from a piece (or 'rod') of the plant that becomes detached from the main plant during the warm summer months, effectively re-rooting itself. New shoots will only appear on the 'rod' once the plant is well rooted. There are two other species in South-Africa (T. tenera and T. caffra) that also thrive indoors.

A number of plants are grown for their attractive swollen potato-like above-ground stems (or caudices). Gerrardanthus macrorhizus, a member of the cucumber family, has smooth green leaves and a massive caudex (macrorhizus means 'big root'). It is a rapid grower with small orange flowers and oblong fruits. It occurs in shady spots on steep rocky screes and the caudex looks just like a flat rock.

Petopentia has beautiful hairless leaves, purplish on the lower surfaces, and a large caudex. Other species with caudices include the elephants foot Dioscorea, Ceropegia species and Bowiea volubilis. The elephants foot Dioscorea elephantipes sends out climbing branches and beautiful shiny leaves during January and February, and becomes dormant in the late spring when it should be kept dry.



Gerrardanthus macrorhizus with its massive caudex. Photo: E. van Jaarsveld.

WATERING, FEEDING AND GENERAL MAINTENANCE

Well-grown healthy house plants usually reflect their owner's love and care. Correct watering and feeding is essential for keeping plants healthy and disease resistant. In understanding a plant's demands one has to look at their native habitat.

How often must I water?

Most of our popular indigenous house plants have a summer-growing winterresting cycle - growing actively in the warmer months and shutting down for the dry season - and these principles should be applied to our house plants, whether they are in our homes or in the workplace.

As a rule, most ordinary nonsucculent house plants should be watered about once a week during the summer. Watering also depends on the temperature and naturally during hot spells, the plants will require more water. Succulents and other plants with storage organs (like bulbs) need water about every two weeks. Many of the species discussed here are hardy and can withstand a month's holiday on the part of their owners.

How much water to give?

Excessive water can harm and even kill plants. It is best to give just enough, and to try and prevent seepage into the pot trays as valuable food minerals are leached out this way. A build-up of salts in the pots can also be prevented by watering until the water runs though the drainage holes three times a year.

What to feed the plants

Liquid organic fertilizers are probably the safest and easiest and there are many types on the market. Dilute the

fertilizer in water and apply as a foliar spray. The advantage of this method is that some plants may suffer from a deficiency of some sort because of the wrong soil pH, and some elements cannot be absorbed through the roots, but can now be administered through its leaves. Feeding should be withheld during the resting months.

The amount of feeding also depends on the soil type. A light potting mix requires regular feeding (which could be administered with each watering) as the soil is not as rich as a loamy soil. Liquid plant foods are low in concentration and this prevents the possibility of chemical burning, making them safer to use. Supranure Plus is well balanced with micro- and macro elements and can also be sprayed on the leaves.

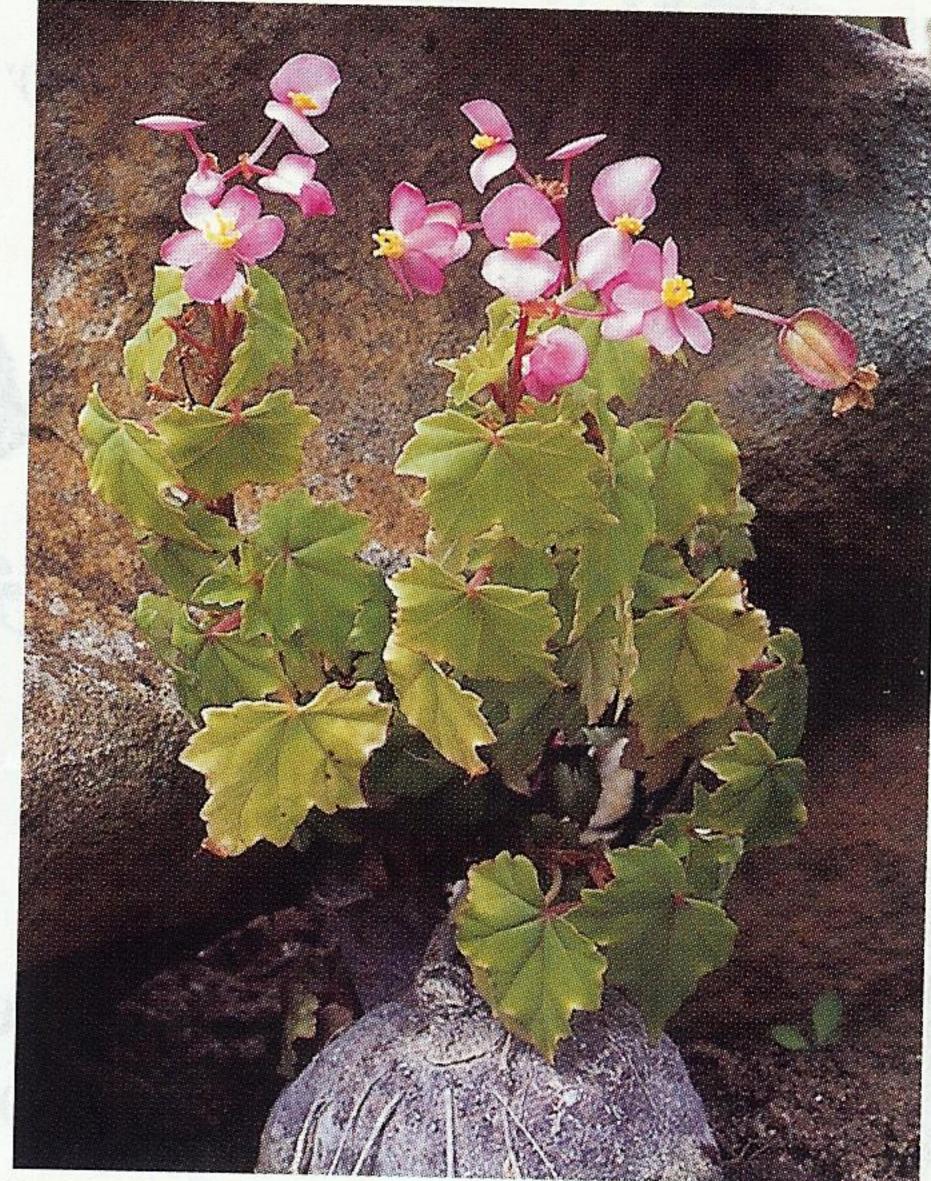
General maintenance

 Remove old leaves, flowers and dead branches regularly.

Regularly inspect for diseases and rot.

• In their natural habitat rain cleans plants, so regularly moisten and wipe dusty leaves, especially the largeleafed plants such as Ficus and Strelitzia. A fine mister will also increase the humidity of the air around the plants.

Please note that these plants are not all available from the Garden Shop at Kirstenbosch, although there will be a few of the species mentioned available there, and at various nurseries and shops attached to botanical gardens. Many plants are not yet in general cultivation. Some seeds are available from the National Botanical Institute, tel (021) 762 1166, and other seed suppliers (see classified advertisements). In the next issue, Ernst looks at succulents for indoors.



Left: The fern Microsorium punctatum. Right: Begonia caffra. Photos: E. van Jaarsveld.

INDIGENOUS FERNS FOR INDOORS

	TT_L!4	Height (cm)	Spore ripens	Growth rate
Name	Habit	Height (cm)		medium
Adiantum capillus-veneris	creeping	30	Aug- May	
Adiantum poiretii	creeping	50	July-Apr	medium
Asplenium aethiopicum	creeping	50	July-Aug	medium
Asplenium lunulatum	tufted	40	Oct-Dec	medium
Asplenium rutifolium	epiphytic	30	Dec-Aug	medium
Blechnum attenuatum	tufted	100	Nov-July	slow
Cyathea capensis	tree fern	1-3 m	Oct-July	slow
Davallia chaerophylloides	groundcover	30	Apr-May	medium
Asplenium rutifolium Blechnum attenuatum Cyathea capensis Davallia chaerophylloides Didymochlaena truncatula Diplazium zanzibaricum Marattia fraxinea	tufted	100		slow
Diplazium zanzibaricum	tufted	100	July	medium
Marattia fraxinea	tufted	200	Jan-Dec	slow
Microsorium ensiforme Microsorium punctatum	tartoa	50		medium
Microsorium nunctatum	creening	70		slow
	creeping groundcover	60		
Microsorium scolopendrium		100	July	medium medium
Nephrolepis biserrata	tufted		July	medium
Polystichum pungens		70	Ion Doc	10
Rumohra adiantiformis	creeping	50	Jan-Dec	slow
Selaginella kraussiana	procumbent	5		fast
Stenochlaena tenuifolia	climber	3-5 m		medium
Tectaria gemmifera	tufted	100	Oct-Feb	medium
Thelypteris bergiana	tufted	50	Aug-May	fast
Todea barbara	tufted	100	Jan-Dec	slow
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All the above ferns reproduce by means of spores.

INDIGENOUS CLIMBING AND TRAILING HOUSE PLANTS

Name Asparagus falcatus Asparagus plumosus Ceropegia woodii Rhoicissus tomentosa Rhoicissus digitata Rhoicissus rhomboidea	Habit dark green fine texture small leaves glossy glossy glossy	Length (m) 3-10 1-3 70 cm 1-10 1-5 1-10	Flower colour white white pink green green greenish	Time of flowering Oct-Feb Feb-Mar Dec-Mar Oct-Feb Mar-Apr Nov-Jan	Growth rate fast medium medium medium medium medium
Senecio bryoniifolius Senecio macroglossus Thunbergia alata Tinospora caffra Urera trinervis	glossy succ. leafed, glossy hairy leaves glossy glabrous	1-4 1-3 1-4 1-5 1-4	yellow yellow orange/yellow greenish greenish	May Oct-Feb Nov-May Nov-Mar	medium medium fast fast medium

Curiosity climbers and trailers

Name Dioscorea elephantipes Dioscorea sylvatica Gerrardanthus macrorhizus Petopentia natalensis Tinospora fragosa Tinospora tapara	Habit caudex caudex caudex caudex deciduous	Flower colour yellowish yellowish purplish greenish yellowish	Time of flowering Feb-Apr Oct-Jan Nov-Apr July-Sept Dec-Jan	Growth rate slow fast slow fast fast
Tinospora tenera	vigorous	yellowish	Dec-Jan	Iast

Line drawings by Jeanette Loedolff.