

# **KRANSPOORT ENVIRONMENTAL AFFAIRS COMMITTEE**

## **INFORMATION PACK**

**Q3CY20**

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## Source reference:

Invasives.org.za

Problem Plants and Alien Weeds of Southern Africa (Clive Bromilow)

Invasive Alien Plants of the Magaliesberg (Hildegard Klein & Otilie Nesor)

National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) ("NEMBA")

Fertilizer, Farm Feeds & Pesticides Act (Act 36 of 1947)

www.arc.agric.za

## DOELSTELLING

Die primêre doel van hierdie dokument, is om inligting aan inwoners deur te gee, ten einde bewustheid te bevorder van plant spesies wat die habitat van Kranspoort kan bedreig asook 'n negatiewe invloed op ons wilde diere kan hê. Hier en daar gaan ons ook iets byvoeg wat diere en hulle voortbestaan bedreig.

Ewe belangrik is Bestuur, Direkse, en die Omgewingsake Advieskomitee se wens dat betrokkenheid van eienaars deur hierdie proses bevorder sal word, aangesien die beheer van indringerplante 'n reuse taak is en slegs deur spanwerk suksesvol kan wees.

Hierdie is 'n basisdokument wat gereeld aangevul gaan word.

## GOALS

The primary aim of this document, is to disseminate appropriate information to owners, Board members and management, in order to promote an increased level of awareness of alien invasive plant (AIP) species which threaten and encroaches upon the natural habitat of Kranspoort, and has a negative impact on the wildlife that we all so intensely cherish. Occasionally we will also include information about selected indigenous mammals, their threat to survival, etc.

Equally important, it is the wish of management, the Board and the Environmental Affairs Committee, to promote an elevated level of awareness amongst all stakeholders, seeing that the tasks and challenges around AIP species can only be surmounted by teamwork.

This is a document that will regularly be updated with topical issues.

## Potato Creeper

*Solanum seaforthianum* (Solanaceae)



## Aartappelranker

A slender herbaceous or woody climber growing 2-3m high with bright green leaves that are thinly textured and deeply lobed into leaflets. Showy blue to purple flowers in long drooping clusters bloom from December to March. Small, shiny berries 5-10mm across, green turning red. Fruits, leaves and stems are poisonous.

### Where does this species come from?

Tropical America

### What is its invasive status in South Africa?

Existing legislation: **CARA 2002 – Category 1 NEMBA – Category 1b**

### Where in South Africa is it a problem?

Eastern Cape, KwaZulu-Natal, **Mpumalanga**, Gauteng and **Limpopo**

### How does it spread?

Seed dispersal, primarily via birds.

### Why is it a problem?

Overtops and smothers other species. **Poisonous**. Indigenous birds could neglect the dispersal of indigenous plants as a consequence of their preference for the fruits of this alien invasive species.

### Control/Eradication Strategy

Find base of plant, and pull out, remove ripe and ripening berries, let rot in a sealed black plastic bag for at least 2 weeks and dispose of. In cases of large plants where root removal is problematic, cut stump as close as possible to the ground (40mm) and apply appropriate herbicide (Kaput or Amazapyr recommended, to be applied as stump treatment, use colourant to identify stumps already sprayed). There are no known biological control measures.

## Silver-leaf Bitter Apple

*Solanum elaeagnifolium* (Solanaceae)

## Satansbos



### Where does this species come from?

Americas

### What is its invasive status in South Africa?

NEMBA – 1b

### Where in South Africa is it a problem?

Identified in Wolmaransstad as early as 1919. It was introduced into SA via hay imports and has now spread to large parts of the Free State, Mpumalanga and Eastern- and Southwestern Cape. Occurs mainly on disturbed soil, neglected lands, in grazing camps, along roads and in water furrows.

### How does it spread?

Seeds mainly spread by birds.

### Why is it a problem?

It is a deep-rooted, multi stemmed, shrub-like, perennial plant in which the aerial growth normally dies back during winter. It can completely swamp planted crops and indigenous species. The young fruits and leaves are poisonous and it has been suspected of being a source of potato viruses.

### Control/Eradication Strategy

Large sums of money has been spent on the control of this species, without significant success. Its extensive root system, penetrating to depths of up to 3m, and its ability to propagate from its root system, makes this species extremely difficult to control. Fluroxypyr is registered as a foliar application, but must be applied to young plants. Biological control is showing promising and several defoliating beetles are currently being studied by the SA Department of Agriculture. The plant, with as much of the root as possible, should be removed before seeds are formed. Continuous removal will debilitate the plant and prevent the roots of forming shoots. In 2015, the leaf beetles (*Leptinotarsa texana*) was released in the Cambedoo NP in Eastern Cape and is showing very positive results.

## Cat's Claw Creeper

*Dolichandra unguis-cati* (Bignoniaceae)



## Katterklouranker

A woody, evergreen creeper that has become a significant threat to biodiversity in many sensitive ecosystems around South Africa. Showy yellow flowers coupled with its climbing habit made the fast-growing creeper ideal as a hedging plant or natural screen for unsightly walls and buildings. The plants' ability to 'climb' is facilitated by its distinctive leaves which consist of two leaflets and a modified three-forked tendril. Each tendril is tipped with a tiny hardened hook which can attach to most surfaces enabling the vine to grow up walls, tree trunks and over other vegetation. It is these tendrils that resemble claws and the feature from which the plant draws its name.

### Where does this species come from?

The vine is originally native to central, and tropical South America, including the West Indies, but has become invasive in a number of regions of Southern Africa, Australia, New Zealand, India, Mauritius, China, New Caledonia and the USA, including Hawaii. This extensive range has been facilitated through the horticultural trade which distributed the plant as an ornamental

### What is its invasive status in South Africa?

Existing legislation: **CARA 2002 – Category 1 NEMBA – Category 1b**

### Where in South Africa is it a problem?

Western Cape, Eastern Cape, KwaZulu-Natal, Mpumalanga, Gauteng, and Limpopo

### How does it spread?

Spread by seed dispersal. In Springs it produces masses of large, yellow, trumpet-shaped flowers and in summer, long slender pod-like seeds capsules that spilt open to release the winged seeds.

### Why is it a problem?

Within these provinces the weed has become a significant invader of cultivated orchards and plantations, riparian corridors, natural forest remnants and disturbed areas such as roadsides and urban spaces. Vigorous growth allows the vine to sprawl over other vegetation and, through a combination of both shading and weight, it can kill even the largest canopy trees. In the absence of climbing support, individual stems grow along the ground resulting in a thick carpet which precludes the growth and seed germination of indigenous understorey vegetation.

### Control

Chemical and mechanical control not very successful although painting cut stems with a systemic herbicide can work and older plants will die completely if cut at ground level. Plants can quickly regenerate from tubers below ground, even broken pieces. Limited success with bio-control implemented in 1999. Prevention is better than control and awareness of the potential of this plant to become a serious environmental problem should be a primary concern.

## Pom Pom Weed

*Campuloclinium macrocephalum* (Asteraceae)



The pom pom weed is an erect perennial with green stems up to 1,3m high. It dies back annually to a root crown. Pink flowerheads surrounded by purple bracts in compact heads appear from December to March. This plant is native to Central and South America.

### Where does this species come from?

Central & South America (Mexico to Argentina)

### What is its invasive status in South Africa?

Existing legislation: **CARA 2002 – Category 1 NEMBA – Category 1b**

### Where in South Africa is it a problem?

Grassland regions of Gauteng, Kwazulu-Natal, Limpopo, Mpumalanga and the Eastern Cape Provinces

### How does it spread?

It spreads easily by seed, and it can also regenerate from underground rhizomes

### Why is it a problem?

It causes serious degradation of the veld, lowering the biodiversity and reducing the grazing capacity by being unpalatable to large herbivores

### Control

Three herbicides have now been registered for this weed but it appears as if control by this means will not be easily achieved. Destroying the above-ground parts of the plant by means of herbicides or fire can actually worsen the problem. This is due to rhizomes being stimulated to shoot and produce more flowers. However, if done repeatedly, it is possible that the plant can become "exhausted". The registered herbicides should be applied early, before the plant produces tall upright stalks. Can be controlled mechanically, provided entire plant is removed. Landowners are encouraged to eliminate this plant wherever possible. Three insect species are being tested for biological control and a fungus has been found growing on pompom weed, which could possibly weaken and kill the plant.



# What is in a Hectare of Pompom Invasion?

**±812 million seeds / ha**

**±2.49 million seedlings / ha**

**±270 000 mature plants / ha**





## Lemon Bush

*Lippia Javanica* (Verbenaceae)

## Koorsbos



The Lemon Bush (*Lippia javanica*) is a strongly fragrant, medicinal plant indigenous to southern and tropical Africa. A hardy, untidy, multi-stemmed shrub of the open grassveld and bushveld, it gives off an intense lemon scent when crushed. Traditionally the leaves have been used for their strong scent as an insect repellent and placed in linen cupboards and potpourri jars, or medicinally in an infusion for fevers, 'flu, coughs, colds and chest complaints. The plant has also been used topically for treating skin rashes and, in strong concentrations, scabies and lice.

### Conservation status

Despite its popularity for traditional medicine and charm use, the Lemon Bush is widespread in the wild and locally abundant in some areas. It is a hardy, drought-resistant plant that grows easily from seed in a variety of soil types. Kindly note that this species is **not** currently listed under NEMBA as an Invasive plant, but it has the potential to inhibit the spread of other indigenous species. It is possible that the aromatic leaves protect this plant as animals do not browse it except under extraordinary circumstances.

### Traditional and future uses

This plant is well known medicinally to many African tribes and to many avid herbalists. The leaves (and stems) are made into a tea as a cough and cold remedy, to bring down fevers and to treat malaria. It is also excellent for treating skin problems, scabies and scalp infections. Some people inhale the smoke for asthma and chronic cough. Preparations are also used as an anti-inflammatory to soothe sore muscles.

### Prevalence within Kranspoort

Rapidly establishing itself across the entire Kranspoort property.

# NEMBA Invasive Alien Species (Categories)

**Category 1a:** invasive species that may not be owned, imported into South Africa, grown, moved, sold, given as a gift or dumped in a waterway. These species need to be controlled on your property, and officials from the Department of Environmental Affairs must be allowed access to monitor or assist with control.

**Category 1b:** invasive species that may not be owned, imported into South Africa, grown, moved, sold, given as a gift or dumped in a waterway. Category 1b species are major invaders that may need government assistance to remove. All Category 1b species must be contained, and in many cases they already fall under a government sponsored management programme.

**Category 2:** These are invasive species that can remain in your garden, but only with a permit, which is granted under very few circumstances.

**Category 3:** These are invasive species that can remain in your garden. However, you cannot propagate or sell these species and must control them in your garden. In riparian zones or wetlands all Category 3 plants become Category 1b plants.

## Disposal of Property

<https://www.property24.com/articles/sellers-must-disclose-alien-vegetation/20935>

(Note: The above article or link should be carefully studied by all homeowners and the KOC Board).

# Report Invasive Species

## National Environmental Crimes and Incident Hotline

**0800 205 005**

Service provider – Deloitte

**Report the  
problem**

**Get a  
reference  
number**

**You can phone back for  
feedback after 6-8 weeks**