

1

Achyranthes aspera - Burweed



Habit: Perennial Herb | Family: Amaranthaceae | Origin: Africa | 🌐 Dec - April: Green, White


INDIGENOUS ALTERNATIVES

Asystasia gangetica
Creeping Foxglove

Hypoestes forskaolii
White Ribbon Bush

Justicia betonica
Paper Plume






1/1b


Ageratina adenophora - Crofton Weed

Habit: Perennial Herb | Family: Asteraceae | Origin: Central America (Mexico) | 🌐 Aug - Dec: White

INDIGENOUS ALTERNATIVES

Hypoestes aristata
Ribbon Bush





1/1b

Ageratum conyzoides - Invading Ageratum
Ageratum houstonianum - Mexican Ageratum



Habit: Annual Herb | Family: Asteraceae | Origin: Central & South America, West Indies | 🌐 All Year: Blue, Mauve, Pink, White



INDIGENOUS ALTERNATIVES

Tetraselago natalensis
Natal Blue Haze

Vernonia capensis
Narrow-leaved Vernonia

Vernonia natalensis
Silver Vernonia





1/1b



Argemone mexicana - Yellow Flowered Mexican Poppy




Habit: Annual Herb | Family: Papaveraceae | Origin: Central America (Mexico) | 🌐 Sept - Jan: Bright Yellow

INDIGENOUS ALTERNATIVES

Barleria elegans
White Bushveld Barleria

Carissa macrocarpa
Num-num





1/1b

Bryophyllum delagoense - Chandelier Plant



Habit: Succulent Herb | Family: Crassulaceae | Origin: Madagascar | 🌐 June - July: Orange, Magenta


INDIGENOUS ALTERNATIVES

Aloe grahamii
Veld Aloe

Cotyledon orbiculata
Pig's Ears

Kalanchoe thyrsiflora
White Lady





1/1a

Campuloclinium macrocephalum - Pom Pom Weed



Habit: Herb | Family: Asteraceae | Origin: South America (Argentina & Brazil) | 🌐 Dec - March: Pink


INDIGENOUS ALTERNATIVES

Tetraselago natalensis
Natal Blue Haze

Vernonia capensis
Narrow-leaved Vernonia

Vernonia natalensis
Silver Vernonia














1/1b

Herbs & Grasses

Beautiful but Dangerous

Invasive Alien Plants of the eThekweni Municipal Area



Invasive Alien Plant Impacts

Invasive Alien Plants (IAPs) are those plants that have been introduced into South Africa from other countries and have the ability to spread into local habitats, without the direct assistance of people. These plants often spread profusely because they lack natural enemies (including diseases or animals that might feed on them) and therefore easily outcompete and smother natural vegetation and crops. This often results in significant and negative changes to local environments. For this reason, IAPs are considered a major threat to biodiversity, human livelihoods and economic development. The impacts caused by IAPs include, but are not limited to:

- increased flood damage,
- competition with agricultural crops,
- displaced indigenous plants and animals and reducing biodiversity,
- increased loss of water from catchments,
- increased severity of fires, and
- expanded range of disease-causing organisms.

Prevention is better than the cure

Prevention of alien plant invasions is far cheaper than control or eradication. This poster mainly profiles plants which are grown and sold by nurseries and used by landscapers and gardeners. Unlike most other exotic (introduced from another country or region) species, these plants have escaped formally planted areas and are spreading in varying degrees into natural ecosystems. Some of the plants on this poster have not been placed in a category by the Department of Agriculture and are thus not covered by the new legislation. Currently they are considered regional problems and/or their weed potential is yet to be established.

Control and Eradication

Control of alien plants in a garden situation is probably best achieved by mechanical means. Tackle light infestations first and then denser infestations. Small plants may be pulled out at the roots especially when the soil is moist. Larger plants may need to be dug out at the roots. The key to success is to tackle the job in a planned way and to diligently follow up to remove seedlings and regrowth. For more serious problems herbicides may be used. It is recommended that professional advice is sought before using herbicides.

1/1b

Canna indica - Indian Shot



Habit: Perennial Herb Rhizomatous | Family: Cannaceae | Origin: Caribbean, America | 🌐 Sept - April: Red & Yellow

INDIGENOUS ALTERNATIVES

Crocosmia aurea
Falling Stars

Gladiolus dalenii
African Gladiolus

Zantedeschia aethiopica
White Arum Lily



1/1b



Cortaderia selloana - Common Pampas Grass


Habit: Grass | Family: Poaceae | Origin: South America | 🌐 Feb - April: Silver - White to Pink, Mauve

INDIGENOUS ALTERNATIVES

Cymbopogon spp.
Turpentine Grasses

Miscanthus capensis
East-coast Broom Grass





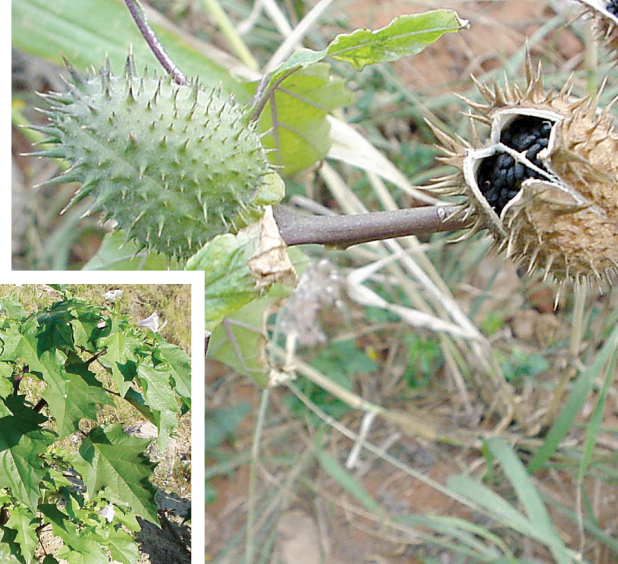

1/1b




Datura stramonium - Common Thorn Apple

Habit: Annual Herb | Family: Solanaceae | Origin: America | 🌐 Oct - March: White, Mauve, Purple

INDIGENOUS ALTERNATIVES

Carissa macrocarpa
Num-num





1/1b



Hedychium coccineum - Red Ginger Lily
Hedychium gardnerianum - Kahili Ginger Lily

Habit: Herb | Family: Zingiberaceae | Origin: Asia (Himalayas) | 🌐 Jan - March: Yellow (Kahili Ginger Lily), Red

INDIGENOUS ALTERNATIVES

Crinum moorei
Moore's Lily

Dracaena aletiformis
Large-leaved Dragon Tree



1/1b

CARA/ Nemba Category

Flower Colour & Flowering Times

Registered Herbicide

Biocontrol

Irritant

Poisonous

Invasive Alien Plant Legislation

In recognising the threats posed by invasive plants, the government of South Africa has provided legislation that either prohibits certain listed weeds and alien invader plants, or controls their use through a permit system. This legislation is the Conservation of Agricultural Resources Act (Act 43 of 1983). The Act lists about 200 plants, which are then grouped into three categories:

CATEGORY 1:

Invader plant species which may not be grown and must be controlled.

CATEGORY 2:

Invader plant species with commercial or utility value, which may only be grown with a permit under controlled circumstances.

CATEGORY 3:

Invader plant species, which have amenity value and which may be grown, but not planted, propagated, imported or traded. You may not grow Category 3 plants within 30 metres of watercourses and the Department may instruct you to control Category 3 plants in other areas.

Note: It is illegal to have category 1 plant species on your property and contravention of this Act can result in prosecution, as will the harbouring of category 2 plant species without the required permit.

References

- DOA. (1983). *The Conservation of Agricultural Resources Act (CARA)*, Act 43 of 1983. Department of Agriculture, Pretoria.
- Henderson, L. (2001). *Alien Weeds and Invasive Plants: A Complete Guide to Declared Weeds and Invaders in South Africa*. Plant Protection Research Institute Handbook no. 12. (p. 300). Agricultural Research Council, Pretoria.
- Bromilow, C. (2010). *Problem Plants and Alien Weeds of South Africa* (p. 424). Briza Publications, Pretoria.
- WESSA-KZN. (2008). *Invasive Alien Plants in KwaZulu-Natal: Management and Control*. A Wildlife Handbook. (p. 124). WESSA-KZN, Durban.
- Walters, M., Figueiredo, E., Crouch, N. R., Winter, P. J. D., Smith, G. F., Zimmermann, H. G., & Mashope, B. K. (2011). *Naturalized and Invasive Succulents of Southern Africa*. (Y. Samyn, D. Vandenspiegel, & J. Degreef, Eds.) (p. 259). ABC taxa.
- Invasive Species South Africa. Website: www.invasives.org.za

Useful Contacts

- Environmental Planning and Climate Protection Department, 166 KE Masinga Road, Durban. Tel: 031-311 7875.
- The Botanical Society of South Africa: www.botanicalsociety.org.za
- The Wildlife and Environment Society of South Africa (WESSA) - KZN Region. wessa.org.za/what-we-do/stop-the-spread.htm
- South African National Biodiversity Institute www.sanbi.org
- Invasive Species South Africa www.invasives.org.za

Acknowledgments

This document was produced by the eThekweni Municipality's Environmental Planning and Climate Protection Department with input from the following organizations:

- SANBI EDRR
- BotSoc
- Conservancies Association
- WESSA-KZN

Thanks to Geoff Nichols, SANBI, Richard Boon, Gareth Chittenden, Errol Douwes, Denise Gillespie and Sharon Louw for photos. Thanks also to Michael Cheek for assisting with taxonomic queries and Hildegard Klein for biocontrol confirmation.

1/1b

Hedychium coronarium - White Ginger Lily
Hedychium flavescens - Yellow Ginger Lily



Habit: Herb | Family: Zingiberaceae | Origin: Asia (Himalayas, India - Indonesia) | 🌐 Jan - April: White, Yellow

INDIGENOUS ALTERNATIVES

Crinum moorei
Moore's Lily

Dracaena aletiformis
Large-leaved Dragon Tree

Zantedeschia aethiopica
Arum Lily



3/1b

Lilium formosanum - Formosa Lily



Habit: Bulbous Herb | Family: Liliaceae | Origin: Asia (Taiwan) | 🌐 Jan - March: White

INDIGENOUS ALTERNATIVES

Crinum bulbispermum
Orange River Lily

Crinum macowanii
River Lily

Crinum moorei
Moore's Lily



1/1b

Parthenium hysterophorus - Parthenium Weed



Habit: Herb | Family: Asteraceae | Origin: North America | 🌐 Sept - May: White




INDIGENOUS ALTERNATIVES

Asystasia gangetica
Creeping Foxglove

Barleria elegans
White Bushveld Barleria

Dimorphotheca fruticosa
Trailing African Daisy





n/a



Paspalum urvillei - Tall Paspalum

Habit: Grass | Family: Poaceae | Origin: South America | 🌐 N/A

INDIGENOUS ALTERNATIVES

Cymbopogon spp.
Turpentine Grasses

Miscanthus capensis
East-coast Broom Grass



x2/1b

Pennisetum purpureum - Napier Grass



Habit: Grass | Family: Poaceae | Origin: America | 🌐 Jan - June: Yellow - Brown

INDIGENOUS ALTERNATIVES

Cymbopogon spp.
Turpentine Grasses

Miscanthus capensis
East-coast Broom Grass

Phragmites australis
Phragmites Reed



1/1b

Pennisetum setaceum - Fountain Grass



Habit: Grass | Family: Poaceae | Origin: North Africa | 🌐 Jan - May: Rose, Purple


INDIGENOUS ALTERNATIVES

Aristida junceiformis
Gongoni Three-awn

Imperata cylindrica
Cottonwool Grass

Setaria megaphylla
Broad-leaved Bristle Grass





1/1a

Rivina humilis - Bloodberry


Habit: Perennial Herb | Family: Phytolaccaceae | Origin: North, Central & South America | 🌐 Oct - June: White, Green, Rosy


INDIGENOUS ALTERNATIVES

Freesia laxa
Small Red Iris

Justicia betonica
Paper Plume

Justicia capensis
Money Plant





1/1b

Sphagneticola trilobata - Singapore Daisy



Habit: Perennial Herb | Family: Asteraceae | Origin: Central America | 🌐 All Year: Yellow - Orange Yellow

INDIGENOUS ALTERNATIVES

Arctotheca calendula
Cape Weed

Bulbine frutescens
Spreading Bulbine

Gazania rigens
Trailing Daisy



1/1b



Tithonia diversifolia - Mexican Sunflower

Habit: Annual or Perennial Herb | Family: Asteraceae | Origin: Central America | 🌐 April - June: Bright Yellow

INDIGENOUS ALTERNATIVES

Chrysanthemoides monilifera
Bush-tick Berry

Euryops tysonii
Tyson's Resin Bush



1b

Tradescantia fluminensis - Wandering Jew
Tradescantia pallida - Purple Heart

Habit: Herb | Family: Commelinaceae | Origin: Brazil, Mexico (Purple Heart) | 🌐 Nov - March: White (Wandering Jew), Pink, Purple

INDIGENOUS ALTERNATIVES

Delosperma tradescantioides

