



PENNINGTON CONSERVANCY

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CHROMOLAENA

Chromolaena odorata

Family: Daisy (*Asteraceae*)

Triffid weed, Armstrong's weed, Paraffin bush

Afrikaans: Paraffienbos

isiZulu: uhalahala, uboyana, usandanezwe

Description:

- ❖ A multi-stemmed perennial shrub, forming monospecific stands up to 2.5 m tall in the open
- ❖ Dense scrambling bushes up to 10 m high among trees
- ❖ The fibrous root system is dense and shallow (20 – 30 cm)
- ❖ Leaves are sparsely hairy, occur in pairs and are pointed ovate to triangular
- ❖ The leaves vary in colour from light to medium green and have three conspicuous veins
- ❖ The leaves have a distinctive smell when crushed
- ❖ Flowers are clusters of mauve to off-white

Origin:

The results of recent surveys, followed by genetic and morphological studies, confirm that the southern African form of chromolaena originates from either Jamaica or one of the other islands of the Greater Antilles

Reason for Introduction:

- ❖ Accidental and thought to have been introduced through Durban Harbour in the early 1940s

Where found / Problems caused:

- ❖ Found throughout coastal KwaZulu-Natal
- ❖ Since establishment, this shrub has spread rapidly along the Natal coastal belt and is now present as far south as Hluhleka Nature Reserve and as far north as Mozambique
- ❖ Competes with and replaces indigenous vegetation, hinders operations in plantations causing increased production costs of timber
- ❖ Increases management costs in nature reserves
- ❖ Considered to be one of the most aggressive invasive plants in tropical and sub-tropical areas

Did you know?:

- ❖ Growth rates of up 20 mm per day have been recorded
- ❖ Seeds are wind dispersed. However, they have small spines and can cling to fur, feathers and clothes and long distance dispersal therefore can occur
- ❖ It is highly flammable, even when green and so allows grass fires to penetrate deep into forests and plantations

Control:

- ❖ Progress with the biological control of chromolaena has been hampered by the failure to match our southern African form of chromolaena with plants growing naturally anywhere else in the world
- ❖ Natural enemies that control chromolaena successfully in other parts of the world have constantly failed to become established on the weed in this country
- ❖ Management control is time consuming and laborious
- ❖ Continuous follow-up is needed
- ❖ Uprooting causes soil disturbance and that stimulates seed germination
- ❖ In KwaZulu-Natal different management programmes have been in operation for more than a decade, managed by the forest department on the western shores, the Working for Water programme (WfW) on the eastern shores and various forestry companies, private and communal land owners
- ❖ Bio-control agents are available



Additional General Information: Control Methods

1. Mechanical: The direct removal of species by hand, or with appropriate tools, instruments and machines
2. Chemical: The optimal use of herbicides to control target species
3. Biological: The intentional use of populations of natural enemies of the target invasive alien species or other methods that adversely affect the biological integrity of the target species
4. Habitat management: Prescribed burning, grazing and other activities
5. Integrated pest management (IPM): A combination of the methods above based on ecological research, regular monitoring and careful co-ordination

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- ❖ The Mtunzini Conservancy for the idea
- ❖ Invasive Alien Plants in KwaZulu-Natal Management and Control: A Wildlife Handbook, produced by WESSA-KZN
- ❖ Control of Invasive Chromolaena odorata: Thesis submitted to the International Institute for Geo-information, Science and Earth Observation. Author – Phoebe Luwum
- ❖ <http://www.arc.agric.za/home.asp?PID=1041&ToolID=63&ItemID=2957>
- ❖ <http://www.google.co.za/search?q=chromolaena+odorata&hl=en&biw=1411&bih=691&prmd=ivns&tbm=isch&tbo=u&source=univ&sa=X&ei=ZifrTdqhJMKmhAeCmZi6Bg&ved=0CDYQsAQ>

It is hoped that this series will create awareness in respect of Invasive Alien Plants and guide and advise us in terms of what is required to control and manage IAPs

Should you have any questions or require further clarity, please contact:

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