

SINK THE PINK

Pompom Eradication Drive



Every year the pink Pompom weed (*Campuloclinium macrocephalum*) invasion of our grasslands reminds us of its relentless and menacing spread. It spreads rapidly and is particularly prevalent in Gauteng, invading a variety of ecosystems from disturbed veld to natural rocky slopes and wetland areas. Pompom outcompetes grasses and other indigenous grassland forbs reducing the grasslands rich biodiversity, degrading its habitats and compromising quality grazing. The Magaliesberg Biosphere partnered with the Cradle of Humankind Management Authority (COH MA) and Cradle Nature Reserve (CNR) to seize an opportunity quite late in the 2024 season to tackle the problem. The approach was threefold—

- 1) Focusing on mechanical removal only, the COHMA provided funds for the temporary employment of 45 local unemployed Kromdraai residents, who were equipped and trained by the CNR to identify and correctly remove the pompom weeds, and dispose of the flowers/seeds.
- 2) To establish a community of practice amongst landowners on the best methods for eradication and control of the weed, and to encourage landowners to be environmental stewards of their properties.
- 3) Precise mapping tracking and monitoring of the clearing to gauge its effectiveness, and to establish best practice and follow-up protocol for next season.



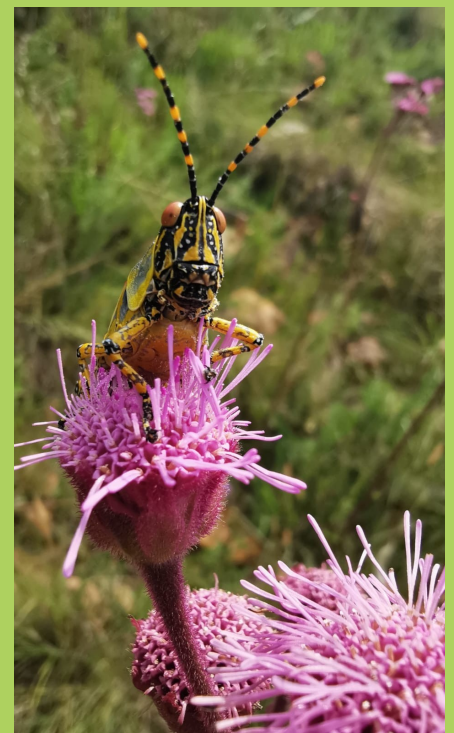
The 2024 project has come to an end and this document is for landowner support and awareness for the management of pompom in upcoming seasons. It describes best practice from the literature, advice from experts and lessons learned during our project, and is divided into 3 sections, based on control method.

Suggested Control Methods:

Pompom weed is a category 1b listed highly invasive plant species originating in Central to South America. According to the NEMBA Alien and Invasive Species List and Regulations (2020), Property owners and organs of state must control Category 1b listed invasive species within their properties. And, the Minister may require any person to develop a Control Plan for one or more Category 1b species occurring on a property.

Mechanical Control

- ◇ Labour intensive—suits small areas, roadside clearing, low density distributions and infestations near water bodies.
- ◇ Using a ladies fork, dig up the plant to below the white root crown which is just below the ground, and from where the root-fingers grow.
- ◇ Ensure as little disturbance to the soil as possible, to avoid pioneer weeds establishing in any ground that has been disturbed.
- ◇ Mechanical control is not suitable for very rocky areas because of unavoidable ground disturbance, and difficulty in removing the crown.
- ◇ Early season removal (Oct-Dec), before the flowers and seeds form, is the ideal time for control, but plants are more difficult to spot. Teams will need to be trained on how to identify the young plants and flower buds.
- ◇ Later in the season (from Dec) flowers form, and it becomes necessary to bag and remove the flowers (which turn to brown seed heads in late summer/autumn)
- ◇ Flowers and seeds in bags can be sealed and left to rot out of the sun, for a year until they decompose. Or flowers can be buried in deep pits (covering with soil at least 60 cm from the surface).
- ◇ Removing the flowers only will cause the plant to shoot more stems and flowers, and it will regrow in following years. Removing the flowers only, can be done in autumn as the plant will not re-shoot.





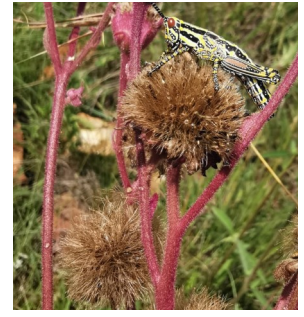
Young plant before flowering



Root crown and fingers



pompom flower buds



pompom seeds

. Chemical Control

- ◇ Broad-leaf herbicide application may damage or kill non-target broad-leaf species. It will not affect grasses. In areas where there is a variety of indigenous herbs, forbs and trees (such as rocky slopes and koppies) careful, targeted application on pompom (and other weeds) is essential.
- ◇ Do not use chemical sprays near waterbodies or in drainage lines or riparian zones, due to possible contamination of groundwater which may cause damage to non-target plants as well as irrigated crops.
- ◇ Livestock and game should be kept away from grazing the sprayed veld for about two weeks, if possible.
- ◇ Practical for large infestations and dense stands, and where there is predominantly grasses and secondary veld with fewer indigenous species. It is useful for rocky areas, as long as only the weeds are targeted.
- ◇ Practical for early season application, glazing the young leaves with poison, to the point before dripping.
- ◇ If plants already have flowers, only foliage should be sprayed. Flowers will still have to be bagged.
- ◇ New plants emerge throughout the season, so repeated application of herbicide may be necessary.
- ◇ Equipment, training and PPE required.
- ◇ Knap-sack hand-pump sprayers or cordless electric high pressure back-pack sprayers with nozzles are recommended. Recommended brands are Morolex and Solo—any good quality brand is worth the spend. Mist sprayers or blowers should not be used due to risk of poison drift to non-target plants.
- ◇ Tractor sprayers can be used for dense infestations on large tracts of planted/ secondary grasslands.
- ◇ Use herbicides according to instructions only.
- ◇ Recommended brands with active ingredient Metsulfuron Methyl absorbed through the leaves.
- ◇ [AMBITION 500g_R607.57 incl Vat](#) (Supplier: Avenrod Plant Protection, Chartwell, Tel: [082 323 5732](#))
- ◇ 3g/10 litres water (mixed with 30ml wetting agent) or 30g/100 litres water
- ◇ [FORESTER 525g_R615.00](#) (Supplier: Atis Chemicals, Tarlton, Tel: [072 391 8405](#))
- ◇ Surfactant Wetting agent SILWET or SILICOTE approx. R500/ litre.
- ◇ The quantity of product detailed above is estimated to clear 2 hectares of dense infestation.
- ◇ Other invaders, often growing alongside pompom like Purple Verbena (*Verbena Sp*) can also be sprayed.
- ◇ The Department of Forestry Fisheries and Environment DFFE runs a HERBICIDE ASSISTANCE PROGRAMME and invasive removal programmes. Take advantage of this offer by filling in the “DFFE Herbicide request form” and “WFW clearing assistance” forms.



Mass Pompom disposal. The team tips flower and seed heads into deep pits

. Biological Control

- ◇ A long-term cost-effective eradication strategy that reduces the vigour and reproductive potential of problem plants. The pompom thrips, *Liothrips tractabilis* sp is native to Argentina.
- ◇ Nymphs and adults feed on young stems & new shoots and flower heads, causing deformities, stunting and reduces flowering. It has greatest impact on seedlings, and on new regrowth.
- ◇ Over the years and after many releases, it has spread throughout the Cradle, migrating a few hundred metres each season. It overwinters in the soil to emerge as nymphs on new pompom regrowth in spring.
- ◇ The ARC-Plant Health and Protection unit distributes limited quantities of thrips to select interested parties in spring, subject to availability.
- ◇ A rust fungus *Puccinia eupatorii*, collected in Argentina in 2003, was found in Pretoria in 2006. It has spread widely since then by wind dispersal and can be seen on the underside of leaves. It causes die-back and yellowing of the plants.
- ◇ Although the biocontrol agents are the most sustainable and cost effective option, they are long-term strategies alongside other committed control efforts, as their recruitment is not significant to counter the severity of the pompom density and spread.
- ◇ For more info: Tel: 012-808-8212; infoweeds@arc.agric.za ; www.arc.agric.za



Above Left: Thrips deformed flower-heads causing reduced flowering.
Right: Pompom thrips red nymphs and black adults
Below Left: Rust fungus leaf damage and yellowing

Sources:

Ref: ARC Biological control: FACT SHEET NO. 7.1

A Field Guide to the Invasive Alien Plants of the Magaliesberg. Hildegard Klein and Otilie Nester (3rd edition) 2024.

Invasive Alien and Problem Plants on the Witwatersrand and Magaliesberg, Field Guide. Karin Spottiswoode, 2024.

Directions for the Control of Pompom, Louise Kritzing, Friends of the Faerie Glen Nature Reserve

Alien Invasive Plants—Pompom Weeds, Louise Kritzing, Friends of the Faerie Glen Nature Reserve

Liame Van der Westhuisen, ARC Plant Health and Protection (personal comment)

Document Compiled By: Magaliesberg Biosphere NPC