

# overnment of South Australia buth Australian Arid Lands Natural PEST MANAGEMENT

## FACT SHEET

# **STOP THE SPREAD OF AFRICAN RUE**

### African rue (Peganum harmala) is an invasive weed with the potential to spread throughout South Australia.

With assistance from the SA Arid Lands NRM Board, landholders and community members in the North East Pastoral District have formed a local action strategy to stop the spread of African Rue in the area.

They are concerned that this persistent weed is slowly expanding its distribution in the Arid Lands region. If you are a landholder, resident or even a visitor to the region there are things you can do to help stop the spread of African Rue.

#### DISTRIBUTION

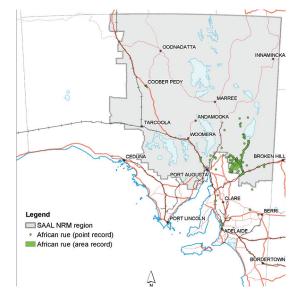
African Rue currently occurs densely in a core area north of Yunta and extends sparsely out from that area for considerable distances. It favours disturbed areas and river banks replacing other more desirable species.

African Rue seeds are commonly moved along roads and station tracks in the mud that sticks to vehicles and earth moving equipment. Seed and root fragments are also readily transported in flowing water.

African Rue is slow to spread to new areas but could potentially grow throughout the State.

#### **IMPACTS**

African Rue is unpalatable to livestock and prefers sites that have been disturbed (eg by



The occurrence of African rue in South Australia Map: Rural Solutions SA

vehicles or overgrazing). At these sites there is less competition from native plants and African Rue seedlings can grow unimpeded.

Adequate moisture is also needed for African Rue to establish at a new site, so disturbed sites with moist soil (eg drainage lines, riparian zones and flood plains) are the most vulnerable.

#### **IDENTIFICATION**

African Rue is a deep-rooted, summer growing bushy perennial weed that grows to about 0.5 m height. It has bright green leaves (2-5cm long)



Early intervention is important - established African Rue plants are difficult to kill due to their extensive root system



#### **CONTACT US**

South Australian Arid Lands Natural Resources Management Board PO BOX 2227 Port Augusta SA 5700 P. 08 8648 5977 E. aridlands@saalnrm. sa.gov.au www.saalnrm.sa.gov.au

Printed November 2009



Australian Government



Printed on 100% Australian recycled paper



that are further divided into linear spreading segments and have a distinct bitter odour when crushed. Flowers are white, with a yellow centre, solitary approx. 25 mm in diameter that form on the end of slender stalks. Globular fruit capsules each contain 45-60 seeds.

Seeds germinate in early spring and germination continues more or less continuously and sporadically throughout summer whenever soil moisture is adequate. Flowering begins in late spring to early summer and continues through to mid autumn. Fruits are produced about one month after the first flowers. All shoot growth dies off in early winter.

#### CONTROL

African rue can be treated in a number of ways but it is difficult to kill established plants and follow up treatment is nearly always required to treat plants re-shooting.

It is recommended to spray in early and late summer as the plant is able to regenerate from the extensive root system which will often require treatment over several years to eventually kill the root system.

African Rue can be sprayed with glyphosate added to clean water with the use of glyphosate covered by an off-label permit. Use a large spray volume to ensure all parts of the plant are completely wet. Surfactant added to the herbicide tank mix improves results and it is best to apply herbicide when conditions are cooler. Always read the directions on the label before use!

Cut-stem application is only feasible where only a few plants are present. Using this method, stems are cut close to the ground with the remaining stem immediately and thoroughly coated with herbicide.

Manual methods such as grader blading and grubbing are not usually effective because the root system persists and re-shoots after the tops are removed. The plant is also able to regenerate from severed root fragments.

#### WHAT CAN YOU DO TO HELP?

If you are a landholder, resident or even a visitor to the region there are things you can do to help stop the spread of African Rue in the Arid Lands region:

- Learn to recognise African Rue, paying particular attention during the summer months when its shoots are actively growing.
- 2. Notify the SA Arid Lands NRM Board if you find African Rue in a new location.
- Prevent plant establishment in watercourses to stop the spread of African Rue during flood events.
- If African Rue is established in watercourses, make sure it is regularly treated during the summer months.
- Minimise vehicle movement through African Rue infestations. If this can't be avoided, ensure the vehicle is thoroughly cleaned down prior to leaving the area.

#### **CURRENT DECLARATIONS**

African Rue is a declared weed under the *Natural Resources Management Act 2004*. It must be actively controlled on properties and roadsides in the SA Arid Lands NRM region.

The Act requires landowners to notify their local NRM Board of new occurrences of African Rue.

Sale of the plant (or goods or produce carrying the plant), and its movement on public roads, is prohibited.

#### FURTHER READING

SA Arid Lands Natural Resources Management Board 2008 'African Rue Local Action Plan'.

Parsons, WT & Cuthbertson, EG 2001 *Noxious Weeds of Australia*, 2nd Edition, CSIRO Publishing, Victoria.

#### ACKNOWLEDGEMENTS

David Cooke, Department of Water Land and Biodiversity Conservation