



# MAURITIUS THORN

by HILDEGARD DE BEER  
Plant Protection Research Institute

Mauritius thorn, *Caesalpinia decapetala* (Roth) Alston, family Fabaceae (formerly Caesalpinaceae, Leguminosae), is an aggressive exotic plant that was apparently originally imported to South Africa as a hedge plant. It soon "escaped" to the surrounding veld where it now constitutes a major threat to natural pastures.

In Afrikaans the name "kraaldoring" is commonly used for this weed.

## MORPHOLOGY

Mauritius thorn is an evergreen, suberect or scrambling, woody, prickly shrub. It can scramble up as high as 30 m into other trees and eventually totally overgrow the prop. The stems are striate, brown, minutely pubescent, and covered with short, stout, very sharp prickles which are either straight or slightly recurved.

The leaves are alternate, bipinnate, up to 300 mm long, with a brown rachis beset with short, stout, recurved prickles on the underside. On the

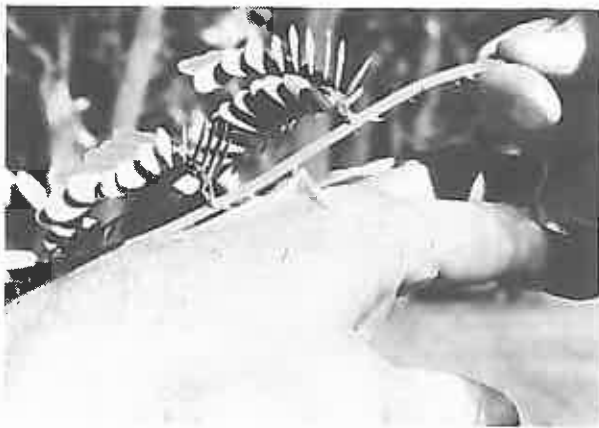
rachis alternate pinnae occur that are subdivided into a large number of elongated pinnules about 15 mm long and 6 mm wide, with very short petioles. The pinnules are bicoloured and both surfaces are finely pubescent. The edges of the pinnules are rolled back slightly and the tips are sharp.

The pale yellow flowers are grouped in dense conspicuous, axillary racemes up to 300 mm long. The separate flowers are about 5 mm in diameter and have five conspicuous pale yellow petals and 10 pubescent stamens that occur in a downward-pointing, cylindrical group. The pedicels are up to 35 mm long.



Mauritius thorn flowers

An impenetrable Mauritius thorn thicket that completely smothers the natural vegetation



Short, sharp, recurved prickles occur on the underside of the leaf

Mauritius thorn fruits are woody, flattened, brown pods with a sharp beak. The pods are slightly curved, about 80 mm long, 25 mm wide, and slightly narrowed toward the base. In the mature pod, flattened-ovoid seeds occur - about 10 mm long and 8 mm wide. When the pods are mature they dehisce along one seam and the black or dark-brown seeds remain in the boat-shaped pod. Propagation is mainly by means of seeds which are usually dispersed by water.

The weed can easily be confused with indigenous *Entada* spp., which may also be scramblers. In contrast to Mauritius thorn, however, *Entada* spp. do not have thorns, the flowers occur in elongated spikes - very similar to those of *Acacia* spp. - and the inner part of the mature pods breaks up into pieces containing one seed each, while the framework of the pod remains on the plant.

## ORIGIN AND DISTRIBUTION

Mauritius thorn is indigenous to India and Sri Lanka. It is a common weed in South Africa, Kenya, Tanzania and Zimbabwe, and also occurs in Australia.

It was apparently first imported to South Africa by missionaries who planted it as fences to keep lions out. Some Black tribes still plant it as a fence around their kraals where it soon forms an impenetrable barrier. Mauritius thorn fences were also planted by Whites in the Hillcrest area of Natal.

It occurs mainly in subtropical and summer rainfall areas, especially in the hot, moist valley areas of the Transvaal, Zululand, Natal, Swaziland and the Eastern Cape. The most severe infestations occur in the Eastern and Northern Transvaal bush regions. It grows mainly along rivers, in plantations and around the edges of indigenous forests.

In 1985 some 3 100 ha of pine plantations were infested with the weed. This means that 1,2% of the

total area planted to pines was infested.

## DANGERS

Mauritius thorn forms very effective fences, but if not pruned back regularly, it soon turns into a dense, impenetrable, thorny thicket. It establishes readily on neglected land and along roads, and ousts the indigenous vegetation.

The weed is an aggressive invader of river banks. The dense leaf canopy overshadows other trees and ousts the natural vegetation. It produces large amounts of seeds that drift down-stream to invade new areas. Owing to the undesirability of applying herbicides near rivers, as well as the inaccessibility of the terrain, infestations along river banks are very difficult to control.

In plantations Mauritius thorn seriously hampers activities. In newly established plantations it retards growth of saplings to such an extent that the saplings often have to be killed together with the weed and the area has to be re-afforested. In the case of an established plantation Mauritius thorn drastically increases exploitation costs.

Because it is difficult to spot Mauritius thorn among other vegetation when it is not in flower, the extent of the infestation is often underestimated.

## LEGISLATION

Under the Conservation of Agricultural Resources act; Act No. 43 of 1983, Mauritius thorn has been proclaimed a weed. It may therefore not be distributed or be permitted to be distributed, and may not occur in any urban area in the Republic. Farms in the Cape Province and the Orange Free State have to be completely free from the weed and in the rest of the Republic it must be controlled on all farm units where it occurs.

## CONTROL

Two herbicides are at present registered for the chemical control of Mauritius thorn, namely glyphosate (L1488) and triclopyr (L3249). To ensure that the entire infestation has been sprayed, it would be advantageous to wait until the plants flower and are therefore easier to distinguish.

The weed can also be mechanically controlled by burning it during the dry season in places where this would be safe, and then immediately removing by hand any seedlings that may emerge. If the plant is chopped down, it often only stimulates growth unless the roots are also excavated.

If they can be reached, the stems can be girdled close to the ground, or the bark can be removed around the stem so that the plants die from the roots upwards within a few months.