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# Center for Smart Agriculture

## Production management of medicinal and aromatic crops



**Module 3:** Weed Management  
**Session 13:** Weed control



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## Aloe

According to the FAO, weed management requires at least two weed controls per year. This weed control method is done by hand, which is very sustainable. The reason why it can be done by hand is, because not much weed controls are needed.



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## Tulsi

Preventative Weed Control  
Cultural Weed Control  
Mechanical Weed Control  
Biological Weed Control  
Chemical Weed Control

### **Mechanical**

Mechanical weed control refers to any technique that involves the use of farm equipment to control weeds. The two mechanical control techniques most often used are tillage and mowing.



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## Periwinkle

- Remove Periwinkle Ground Cover Manually
  - For periwinkle weed control in large areas where digging is not practical, use an oil based herbicide.
  - The cuticle on the leaves repels water based applications, but the oil base will allow the chemicals to adhere to the leave and gradually travel into the vascular system of the plant.
  - Triclopyr mixed with mineral oil is effective but applications will need to be repeated as straggler plants crop up.



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## Coleus

Pre-emergence application of oxyfluorfen at 0.15 kg ha followed by one hand weeding at 35 days after planting recorded the least weed count and weed dry matter production



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## Citronella

Among different methods of weed control, application of herbicides like salts of 2,4-D, diuron and simazine, oxyflourfen and mulching controlled the weeds and increased the yields of citronella Java.



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## Lemon Grass

In row-planted crops, inter-operations can be done by a tractor-drawn cultivator or hand-hoe.

Distillation waste of this crop applied as organic mulch @ 3 tonnes/ha is found effective for controlling weeds in the crop.

Among herbicides, Diuron @ 1.5 kg ai/ha and Oxyfluorfen @ 0.5 kg ai/ha are effective for weed control. Lemongrass has been found to be a weed smoothing crop.

After it is established, it may inhibit weeds.



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## Vetiver

Vetivergrass can be killed by glyphosate herbicide, dense shade, and by digging up the crown.





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## Rose

Preemergence herbicides can be used around roses before weeds emerge or after weeds are removed, but before others germinate.

While these herbicides primarily control grasses, they also control broadleaf plants such as chickweed, fiddleneck, knotweed, lambsquarters, pigweed, prostrate spurge, oxalis (from seed), and purslane.

These herbicides will not control established weeds.



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## Rose

The preemergence herbicides oryzalin (Surflan) and pendimethalin (Pendulum) were effective in field trials and did not injure roses.

To control established grasses, the postemergence herbicides fluazifop-p-butyl (Fusilade) and clethodim (Envoy) were effective in field trials.

When these herbicides are used according to label directions, they will not injure rose plants.



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## Rose

Roses are sensitive to postemergence broadleaf herbicides that may be used in landscapes, such as 2,4-D, triclopyr, and dicamba;

Roses are also very sensitive to glyphosate (Roundup and many other trade names), which can be absorbed through the green stems in addition to the leaves. [Glyphosate damage](#) may appear at budbreak the following spring after a summer or fall application that contacts leaves or stems; symptoms include a proliferation of [small, narrow shoots and leaves](#).



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**Thank You**