

Integrated Weed Management



THE USE OF AGROCHEMICALS IS NECESSARY FOR FARMING OPERATIONS E.G. HERBICIDES TO SUPPRESS WEED COMPETITION AND PREVENT YIELD LOSSES. THE SASRI HERBICIDE GUIDE (2010) IS AN AID TO WEED CONTROL OPERATIONS AND ACTS AS A GUIDE TO THE CORRECT AND APPROPRIATE SELECTION OF HERBICIDES. AS FAR AS POSSIBLE, GROWERS ARE ENCOURAGED TO LIMIT THE USE OF THESE HERBICIDES BY ADOPTING GOOD FARMING PRACTICES. THESE INCLUDE:

- Treating small weed patches before they expand by spotspraying. This is an insurance to prevent the patches from expanding, causing loss in yield.
- Ensuring the correct calibration of knapsacks and boom sprayers. This results in successful weed control and prevents the need for re-application.
- The timing of application is essential, according to the growth stage of weeds. Aim to apply herbicides soon after harvest, or within two weeks of planting, when weeds are still emerging and are very small. The control of big weeds is costly and they spread seed.
- Prevent encroachment into fields from verges and cane breaks by chemical mowing with registered herbicides.

Agrochemicals represent one component of an Integrated Pest Management (IPM) strategy. It is strongly recommended that a broader range of options is adopted to complement the use of agrochemicals. Some alternative practices and approaches to weed control include the following:

- Hand weed/rogue escaped weeds like *Panicum maximum* (barbi grass) and place their seed heads in bags to carry away from the field for burning.

- Integrate other control methods into the verge weed control programme, e.g. mechanical mowing, use of *Melinis* as a hedge to push out cynodon and other weeds or plant a line of cane along the field edges to prevent the encroachment of any grass runners into the field.
- Mass rearing and the release of biological control agents for alien invader species.
- Use of green manures to combat weeds e.g. oats, soybean and sunn hemp.
- A trash blanket spread evenly over the field suppresses weeds by preventing their germination. Less frequent herbicide spraying is required and control costs are reduced.
- Practice field hygiene: ensure that mechanical operations such as ploughing, harrowing, ridging and even mechanical loading do not spread runners in the fields. Clean vehicles and farm implements to prevent spreading weed seed within and between fields. Ensure that imported material such as manure or compost comes from a good source and is free of grass seed. Keep field edges/verges, fencelines, roadsides, waterways and irrigation channels free from weeds to prevent the spread of weed seeds. Do not handweed grass verges and throw the grass into the fields as this spreads weeds. ☺

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