

**Issued in: July 2003****Serial No: 11/03****SAFE AND EFFECTIVE USE OF HERBICIDES**

(This Advisory Circular replaces Circular No. W6, Serial No: 20/71, issued in July 1971)

1. Follow all precautions recommended in other Advisory Circulars in this series, dealing with herbicides, before using any of the formulations.
2. Adopt a selective spraying program avoiding desirable weeds and resistant weeds for the given herbicide. Such resistant weeds should be treated with specific herbicides at dosages recommended. Alternately, other more effective control measures, if any, may be adopted.
3. Select the most suitable herbicide based on the range of weed species to be controlled. Use the correct dosage of herbicide and mix thoroughly in clean water and then make up the spray volume required to cover the area to be treated. Wash tanks thoroughly in clean water before use to avoid any contamination.
4. Retain the number of herbicide applications for the year to a minimum, and consider using a range of herbicides in rotation than persisting with a single herbicide. This would help in averting a build-up of resistant weed species.
5. Do not spray herbicides on creepers growing over the tea bush. These should be pulled down and laid on the inter-row space and then sprayed. Mature woody plants and deep-rooted species should be slashed, and the tender regrowth sprayed.
6. Spray weeds when they are relatively young, before they go into flower and seed. The ideal stage to spray would be when the weeds are about 10 – 15 cm in height.
7. Select a calm day for spraying, as wind could carry the spray drift away from the intended area of spray. Also avoid the very hot period of the day for spraying.
8. Use a spray guard when spraying on the inter-rows of tea. This would prevent excessive spray drift on to peripheral branches and green stems.
9. Use lever operated, diaphragm type knapsack sprayers which are more appropriate for herbicide applications. All sprayers must be checked for proper performance and the trigger valves and nozzles need to be checked specifically for leaks.

10. Use the correct type of poly jet/flood jet nozzles (**yellow:** swath 0.5 m, spray output 6 l per minute or **green:** swath 1.0 m, spray output 1.2 l per minute or **blue:** swath 1.5 m, spray output 1.8 l per minute).
11. Wear protective clothing for mixing and spraying herbicides.
12. Clean thoroughly the tank, nozzle and lance after use, and wash self and the protective clothing used. Do not throw empty herbicide containers (particularly into streams and waterways) but ensure that they are smashed and buried to avoid reuse.
13. Careful supervision of the entire operation is absolutely essential to make a success of chemical weed control.
14. Do not store herbicides with fungicides, insecticides, fertilizers and other agro-chemicals.

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