Growth retardants

by

D. G. Reid

In certain cases, although the grassing down of areas is desirable maintenance, especially mowing with machines, it is either difficult or practically impossible. In such cases the retarding of grass growth is advantageous.

The chemical to use is Maleic Hydrazide. Repeated applications over two or three years has the effect of altering the composition of a grass sward to consist mainly of the lower growing grass species.

To inhibit the growth of grass and to reduce the frequency of cutting, this chemical can be applied to roadside verges, rough grass areas in cemeteries, banks, around trees and posts and by the greenkeeper, for the treatment of bunkers.

Used as suggested, it is not strictly a killer of weeds, but if it is desirable to eradicate broadleaved weeds from the site and retain the grass, the addition of a hormone-based selective weed killer 2,4-D is recommended, since with the retarding of the grass, broad-leaved weeds thrive, due to reduced competition.

Maleic Hydrazide does also exhibit some weedkilling properties, and when applied with 2,4-D the control of Cow Parsley is superior to that obtained from 2,4-D alone.

Other uses of Maleic Hydrazide include the retardation of privet hedges and the control of sucker growth on trees.

Mixing

Maleic Hydrazide mixes readily with cold water. If a selective weedkiller is to be sprayed at the same time for a control of broad leaved weeds, the retarder should be dissolved in the full quantity of water before adding selective weedkiller.

Timing

Best results follow Spring application shortly after the grass has begun to grow. Mid-April to mid-May; depending upon an early or late season. A second application after 8 to 10 weeks is sometimes advisable where a high standard of suppression is required, when $1\frac{1}{2}$ gallons per acre will check growth until the following May. The same dosage will then keep grass retarded for the rest of the season.

Always spray in fine weather, when rain is not likely for 30 hours. Do not spray during a prolonged drought. If treatment has been unavoidably delayed and the growth is rank, cut the grass first and carry out the spraying when the grass has regrown to 4 to 6 in. high.

Application details

- (1) For highway verges, banks, etc., 1 application at the rate of $1\frac{1}{2}$ gallons in 40/80 gallons of water per acre, per annum.
- (2) For housing estates, cemeteries, etc., 2 applications of 1 gallon in 40/80 gallons of water per acre, per annum.

Precautions

Grass growth retarder is of low toxicity, but when using any type of chemical it is advisable to wash the hands and other skin parts exposed to the chemical spray.

Rubber gloves and overalls should be worn if the spraying programme is a long one.

Price and Quantitites - January 1st 1971

Maleic Hydrazide with 2,4-D added by the manufacturer. 1 gallon ± 2.70 . Units of 3 x gallon per gallon ± 2.60 , 5-gallon drums each ± 12.50 , 5 x 5-gallon drums each ± 12.00 .

With grateful acknowledgements to THE GROUNDSMAN, February, 1972.

July 1972