Alligatorweed Control With Visco-Rhap*

HAROLD P. SNOW

Hercules Incorporated,
Dallas, Texas

Until recently, the city of Orange, Texas had a problem similar to that of many Gulf Coast communities. That problem was a prolific growth of alligatorweed [*Alternanthera philoxerides* (Mart.) Griseb.] invading the waters of Adams Bayou. Adams Bayou is a natural water course that is an integral part of the Orange County drainage system and is normally from 2 to 8 feet in depth. Over the years, the alligatorweed had grown outward from the banks and established itself into great floating mats with which we are familiar. During the periods of heavy rainfall, draglines were used as a desperation measure at bridges and other key points to control it.

In May of 1967, several test plots were established with 3 formulations of Visko-Rhap* herbicides containing 2,4-dichlorophenory acetic acid, 2,4,5 trichlorophenoxy-propionic acid (Silvex) and equal parts of 2,4-D and 2,4,5-Trichlorophenoxy acetic acid (2,4,5-T). The rate of each was varied from 2 lbs. to 12 lbs. per acre in 8 gal. to 48 gal. total spray. The Visko-Rhap* formulations were used primarily to prevent drift since most of Adams Bayou borders on residential lots and other sites where valuable trees and shrubs could be damaged. It was also felt that the long lasting and superior penetrating qualities of Visko-Rhap* would aid in reaching the dormant bud in the node of the alligatorweed.

Silvex and the 1D-1T (equal parts of 2,4-D & 2,4,5-T) performed the best at 8 lbs. and 32 gal. total spray per acre. The Visko-Rhap 1D-1T was selected primarily for economic reasons and the fact that it was a more versatile chemical for use on other weed problems throughout the District.

In late June and early July, the entire expanse of Adams Bayou was sprayed with 8 lbs: of Visko-Rhap* 1D-1T by helicopter. Six weeks later, those areas that appeared to be doubtful were resprayed by boat with the same dose. Growth at the start of spraying was about two and a half feet high.

The results were even better than were expected. By September, Adams Bayou was completely free of alligatorweed and remains so to this day. Each spring the banks of the bayou are treated where the alligatorweed is attempting to come back. So far, it has been kept under control.

We can only speculate, but it appears that, coupled with proper timing and growth conditions, the Visko-Rhap* invert formulation did penetrate to the dormant buds and the potential regrowth was destroyed.

*Visko-Rhapt is Hercules Incorporated trademark for its phenoxy herbicide invert formulations.