Eurasian Watermilfoil A Rapidly Spreading Water Plant

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ABSTRACT

Eurasian watermilfoil (*Myriophyllum spicatum*) is widely distributed in Europe and Asia, and now is spreading rapidly in North America. It was known to be in lakes in northern New Jersey before the turn of the century.

It was first collected in the Chesapeake Bay area in 1902 and is now established in some 200,000 acres, but the area of heavy infestation is considerably less.

At the present this plant is established in the Northeast in Massachusetts, Vermont, New York, Pennsylvania, New Jersey, and Delaware. In the Midwest it is reported in Ohio, Indiana, Illinois, and Wisconsin. It is now invading lakes or estuarine areas in Maryland, Virginia, North Carolina, Georgia, Florida, Alabama, Louisiana, Texas, and also is reported in California.

New invasions in the Southeastern States have recently occurred at Lake Seminole, Georgia; Chassahowitzka Lake, Florida; Caddo Lake, Louisiana; and several interior ponds in Texas. Eurasian watermilfol also became more widely spread in other aquatic habitats in the States where it previously occurred.

It was first reported in the Currituck Sound, North Carolina, in 1965, and the fall of 1966, it was established in some 67,000 acres of which there was heavy infestation on some 8,000.

This explosive rate of spread is similar to what has been observed in parts of the Chesapeake Bay area, TVA reservoirs, and elsewhere.

Expanded control of aquatic weeds to include eurasian watermilfoil is under consideration by the U.S. Army Corps of Engineers. Meanwhile, it continues to become more widely dispersed and solidly entrenched in important aquatic habitats throughout the United States.

It is a serious problem plant because it produces a loosely woven blanket growth up to 7 feet or more in thickness that dominates the water. It crowds out native vegetation and severely damages habitat for waterfowl and sports and commercial fisheries. It hinders water movement, can cause stagnation, and produces ideal mosquito breeding

habitat. It severely curtails navigation and other multiple uses of water.

Of several procedures found successful for control of watermilfoil the butoxyethanol ester (BE) of 2,4-dichlorophenoxyacetic acid (2,4-D) on attaclay granules was most effective under a wide range of situations where eurasian watermilfoil grew. In Chesapeake Bay, uniformly good results occurred from treatments of eurasian watermilfoil made at low water slack just before ebb-tide. The period for successful treatment was during the last 2 weeks of May into the first week of June prior to initial flowering. With reference to application of this granular 2,4-D (or other treatments in new locations) repeated preliminary tests at different stages of growth and under different ecological situations may be needed to fence in or refine control procedures so as to assure uniformly effective results.

Follow-up investigations on the toxicological aspect revealed that this treatment could be applied without causing adverse effects on fish, waterfowl, or their food-chain organisms in Chesapeake Bay. Obviously, more toxicity studies should be made in the Bay and particularly in new areas where control of eurasian watermilfoil is to be conducted.

The residue problem of 2,4-D in opsters and clams continues to be a major obstacle to operational control. Oysters and clams are not adversely affected by 2,4-D treatment of milofil. Analytical work indicates that these shellfish pick up 2,4-D but in time tend to cleanse themselves of its residue. However, no tolerance has been established by U.S. Food and Drug Administration because of a failure to agree on an accepted analytical procedure for detecting 2,4-D.