

Maintenance Control Of Hydrilla

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INTRODUCTION

Citrus County has 29,680 acres of lakes, plus three rivers located on the West Coast, the Crystal, the Homosassa, and the Chassahowitzka. In addition to these three rivers, Citrus County is bordered by 53 miles of the Withlacoochee River.

Within the three rivers located on the West Coast we are plagued with hydrilla (*Hydrilla verticillata* Royle), and Eurasian watermilfoil (*Myriophyllum spicatum* L.). For the past 2 years we have been utilizing the bi-vert system with various mixtures of herbicides in the water phase for the control and maintenance of hydrilla within these three rivers.

USE OF BI-VERT SYSTEM

Upon venturing into the bi-vert system we found that our applications had to be quite heavy in order to gain any control, especially in flowing water. These areas were checked every week to determine the approximate amount of fall-out obtained. These plots were closely watched for a period of about 4 weeks. At the end of this time if our evaluation of control was not satisfactory, a lighter application of the same herbicide was then applied. After approximately 90% control was gained, all plots were again evaluated in 2 to 3 weeks.

During the late fall of the year, we have found that on a first drop with the bi-vert system, we could gain approximately 95 to 98% control. This treatment would hold for approximately 6 to 8 months, then regrowth would occur. When the regrowth reached approximately 1 to 2 ft, a retreatment was applied. We have found further that on retreatment for aquatic growth of approximately 2 ft in height in water depth of 20 to 30 ft, we were not obtaining the control of this new growth as was desired. Therefore, we installed 8-ft lengths of projectile hoses on the boom. By implementing this we discovered we were getting the herbicide closer to the plant and at the same time experiencing better control than we were previously. During the heavy growth months (June, July, and August), we have found it necessary to increase our application in order to maintain a balanced maintenance program.

COMBINATION OF BI-VERT AND HARVESTER

This county has also performed some experimental work by harvesting hydrilla to the depth of 6 to 8 ft prior to treatment with the bi-vert system. Then by treating with the bi-vert system, we have found that very good control could be obtained. However, this type of operation is very expensive. I believe that if aquatic plant control can be obtained with the bi-vert system, and with proper evaluation and a good continuous maintenance program, this control will give our waterways back to the citizens of this State for fishing and recreation.

It is my belief that there is a place for herbicides in a maintenance program if they are used and supervised properly without causing any pollution or harm to marine life. However, it is hoped that some mechanical device can be developed which will efficiently and economically help to control aquatic weed infestations within the State of Florida. Once control is gained it is a continuous maintenance problem to continue that control. This also has proven to be very expensive. I believe that encouragement should be shown to all our counties to establish a weed control department, thereby having an effective maintenance program and cooperation between counties in the State. Within our area, we are the only county having a weed control department, and trying to maintain control of aquatic weeds within our waterways. It is believed that more encouragement would result if adjacent counties were trying to combat this aquatic program.

CONCLUSION

I realize that the State of Florida has a long way to go and a lot of questions to answer regarding Aquatic Weed Control. If we all show enough interest and determination (with some financial aid from the State) progress in this field can be obtained. It is my opinion that we are still in the "Pioneering stage of Aquatic Weed Control" and a lot of research is still needed for advancement in this field.