

C19-P

POTENTIAL REDUCTION OF ADVERSE ENVIRONMENTAL AND HEALTH IMPACTS OF METHYL BROMIDE AND OTHER NEMATICIDES

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Two environmental regulations have major implications for vegetable production in Florida. The first is the Montreal Protocol Agreement, which resulted in the phase out of methyl bromide (MBr) by 2005. The second regulation is with the use of Telone (1,3 Dichloropropene), the main replacement chemical for MBr, which includes major worker safety issues and ground water contamination in Dade Co. To reduce Florida vegetable growers, potential adverse environmental/health impacts because of these two major environmental issues, Glades Crop Care, Inc. (GCC) has developed a nematode sampling program that potentially will result in reduced levels of nematicides. Through a Risk Avoidance and Mitigation Program (RAMP) Grant, Glades Crop Care (GCC) is developing field data that indicates the locations, movement and populations of root knot nematode (RKN, *Meloidogyne* spp.) and other plant parasitic nematodes. In order to generate field-level data for the new sampling protocol, GCC has tested a geo-referenced nematode sampling system consisting of 1) crop bioassays, 2) soil nematode assays, and 3) selective plant bioassays. Our program will show growers the location and distribution of their nematode infestation(s), what affect various control measures and no nematicide applications have on RKN and other plant parasitic nematodes, and how nematode population trends are impacted by various combinations of management practices.