PROPOZONE* The IDEAL MB REPLACEMENT

(ABERCO 100% Propylene Oxide) Morris Warren & Tom Griffith

The second year of strawberry greenhouse, microplot and field evaluations shows PROPOZONE to have excellent potential as a soil fumigant to replace methyl bromide.

For over 35 years the cocoa, nutmeat and spice industries have safely used this registered product to kill insects, food pathogens and reduce plate counts. Laboratories have used propylene oxide to "sterilize" soil prior to plant research.

Today we can report that ABERCO's PROPOZONE has the potential for being an inexpensive alternative to methyl bromide that can be applied safely by drip application or shank injection for the effective control of fungal pathogens, nematodes and several weed species.

1) Fungal Pathogens:

In a 2001/2002 strawberry field study in California conducted by Driscoll, PROPOZONE was the leading experimental product with yields equal or superior to the methyl bromide chloropicrin treatments. Yields were also superior to the other experimental products included in the tests.

2)Nematodes:

Dr. J. Noling reported at the MBAO 2001 conference that PROPOZONE at 50 gal/A was the best in reducing rootgall severity caused by (Meloidogyne incognita) in his Fall 2001, Lake Alfred, Fl tests.

Dr. R. Rodriguez-Kabana also reported at the 2001 MBAO Conference that his greenhouse tests showed PROPOZONE very effective against Rotylenchulus reniformis in highly infested soil from cotton fields.

3) Weed Control:

Preliminary results in a gladiolus test by Dr. Jim Gilreath, Bradenton, Fl. indicates promising results for PROPOZONE shank injected at 30 gallons/A for control of a heavy infestation of mixed yellow and purple nutsedge. Dr. R. Rodriquez and others have reported similar results.

Approximate PROPOZONE costs (depending on required packaging)

Heavy infestation 45 gal/A $\times 20/\text{gal} = 900/A$ total preplant costs*

Moderate $30 \text{ gal/A} \times \$20/\text{gal} = \$600/\text{A}$... Light $20 \text{ gal/A} \times \$20/\text{gal} = \$400/\text{A}$...

** as herbicides probably will not be needed

Farmers and EPA have been looking for a simple safe MB "drop in" replacement that is safe to crops and man, effective against a broad spectrum of pests , safe to the environment and is affordable. We believe that PROPOZONE has the potential for meeting all of these tough criteria.

Tests are continuing to establish the correct dose under various conditions

* ABERCO trademark