

## Alternative fumigant for cut flowers sector

In the United States, researchers at USDA's Agricultural Research Service (ARS) and the California Cut Flower Commission are together testing methyl bromide (MeBr) alternatives for cut flowers – including propargyl bromide, a chemical not yet approved for use as a pesticide. The team injected fumigants into the soil and buried small nylon bags filled with *Fusarium oxysporum* spores, weed seeds and nematodes into dozens of test pots ranging from light sandy soil to heavy clays. The compounds tested include methyl bromide and chloropicrin, propargyl bromide, iodomethane and metam sodium. Results indicate that either propargyl bromide or iodomethane offered pest control efficiency comparable with that of MeBr.

Also, the ARS Horticultural Crops Research Laboratory is working with a leading grower of roses to develop MeBr alternatives. Researchers are primarily focusing on root-knot nematodes that feed on roots and cause galls to form, interfering with the plant's ability to absorb water and nutrients. ARS researchers have created "micro-plots" using concrete pipes turned on end and buried in the ground to study alternatives such as propargyl bromide and combinations of compounds. Different methods of applying pesticides are also being investigated. *Contact: Mr. Thomas Trout,*

*Agricultural Research Service, the United States. Tel: +1 (559) 4533 101; Fax: +1 (559) 4533 088; E-mail: ttrout@ars.usda.gov; Or Ms. Marcia Wood, Agricultural Research Service, the United States. Tel: +1 (301) 5041 662; E-mail: marcia.wood@ars.usda.gov. (Website: www.uneptie.org)*