

## **Methyl bromide alternatives for soil disinfestation**

Researchers have reported that biofumigation with solarization and metam sodium with solarization are the best alternatives to methyl bromide for certain crops grown in Guatemala. These results were provided by a demonstration project funded by the Multilateral Fund and conducted jointly by the United Nations Industrial Development Organization (UNIDO) and the Institute for Science and Technology Agricultural Research (ICTA). The effectiveness of biofumigation or metam sodium with and without solarization was also tested, apart from the effectiveness of steam (a non-chemical soil treatment), basamid (a chemical fumigant) and solarization (a non-chemical method that uses heat from the sun to kill pathogens in the soil).

Results have shown that biofumigation with solarization offers good nematode control for broccoli grown in humid highland region of Chimaltenango, and for tobacco, melon and tomato crops grown in the hot region of Zacapa. This technique is an organic method of pest control, in which the soil is covered with organic matter, then with a plastic sheet and exposed to heat from the sun for 4-6 weeks. The organic material decomposes to produce gases that control pathogens while concurrently improving the soil fertility.

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