SOIL DEPTH AND SPECTRUM OF BIOLOGICAL ACTIVITY FROM TARPED SURFACE SPRAYS OF METHAM SODIUM

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Extensive research has provided us with reliable information with which we can predict movement, biological activity and, as a result, the preferred methods of application for our standard fumigants: methyl bromide, 1, 3, dichloropene chloropicrin, and combinations thereof. The same cannot be said for metham sodium but the reasons for this are numerous and gradually becoming well understood. Considerable work has been done in attempts to control weeds by surface sprays of high dosages of metham sodium followed by tarping. Many of these applications have provided successful weed control but rare mention or consideration has been given to pests other than weeds or how deep in the soil profile the method of application provides control of pests other than weeds, i.e., fungal or nematode control. We have in the past, and are currently, evaluating this aspect of pest control with metham sodium when applied in the manner described, i.e., surface sprays, and tarping on both loamy sand and sandy loam soils. The results indicate at this time that such applications will provide a high degree of both nematode and damping off fungal control to depths as great as 6" below the bed surface. When other chemistry or methods are being evaluated for pest control and metham sodium is used for weed control in the way described a true evaluation of the chemistry or method under consideration cannot be made unless a stand alone metham treatment made in this weed control fashion is available for comparison. Unpublished data will be presented for participant scrutiny.