TARGET APPLICATIONS OF VAPAM®/K-PAM® TO KEY PEST FOR BEST RESULTS

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Vapam (metam sodium) and K-Pam (metam potassium) are broad-spectrum biocides that will suppress or control most soil borne pests including nematodes, weeds (including nutsedge), and soil borne diseases. Vapam and K-Pam have excellent application flexibility and are effectively applied worldwide by many methods, such as chemigation, drip irrigation, incorporation with a rototiller, and injection into the soil with various shank spacing/depth arrangements.

Due to limited movement in the soil relative to methyl bromide, Vapam and K-Pam must be placed close to the target organism during the application process. Target pests are not always in the same area of the soil profile or bed. Nematodes are often deeper in the soil while weed seed and nutsedge tubers are usually in the top 4 to 8 inches. Disease pathogens are more variable and may be located throughout the bed or soil profile. For best results, the application method should target the product to the area of the bed/soil profile where the key pest is most abundant. This principle is why Vapam/K-Pam is commonly successfully applied through such varied application methods.

This poster demonstrates that Vapam/K-Pam can be successfully used as a methyl bromide alternative or as a part of an alternative program when the application fits the key pest. Data from three varied application processes are presented as follows:

- K-Pam provides control of nutsedge in Florida peppers when sprayed and incorporated by rototiller.
- Vapam provides control of disease complex in California strawberries when applied through drip irrigation.
- Vapam provides control of nematodes in potatoes when injected into bed through deep shanks.

For consistent results, Vapam/K-Pam application must target the key pest. Control failures may result if the application does not result in product reaching the pest zone in sufficient concentration and duration for effective results. It may be necessary to split Vapam/K-Pam applications and apply through differing methods or to utilize combination treatments with other fumigants or pesticides to achieve a broad-spectrum program. Vapam and K-Pam are proving to be valuable components of many successful methyl bromide replacement programs when applied correctly to target the key pest organism.