

BEHAVIOR OF MITC IN SOIL AFTER APPLICATION OF METAM-Na AND METAM-k

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This research explored the fate of metam sodium (Vapam HL, 42% sodium methylthiocarbamate) and metam potassium (K-Pam HL, 54% potassium N-methylthiocarbamate) in various soils under laboratory conditions. The objective of this research was to determine the effect of soil type, temperature, and water content on MITC generation and degradation after application of Vapam and K-pam to soil surface by drip fumigation or after injection at 15 cm soil depth in a 60-cm tall stainless steel column. MITC generation and movement were monitored under various soil temperatures and water contents. Our results suggested that the formulations have no different impact on the generation and degradation of MITC. Both formulations behaved similarly in all soil types as shown in Figure 1.

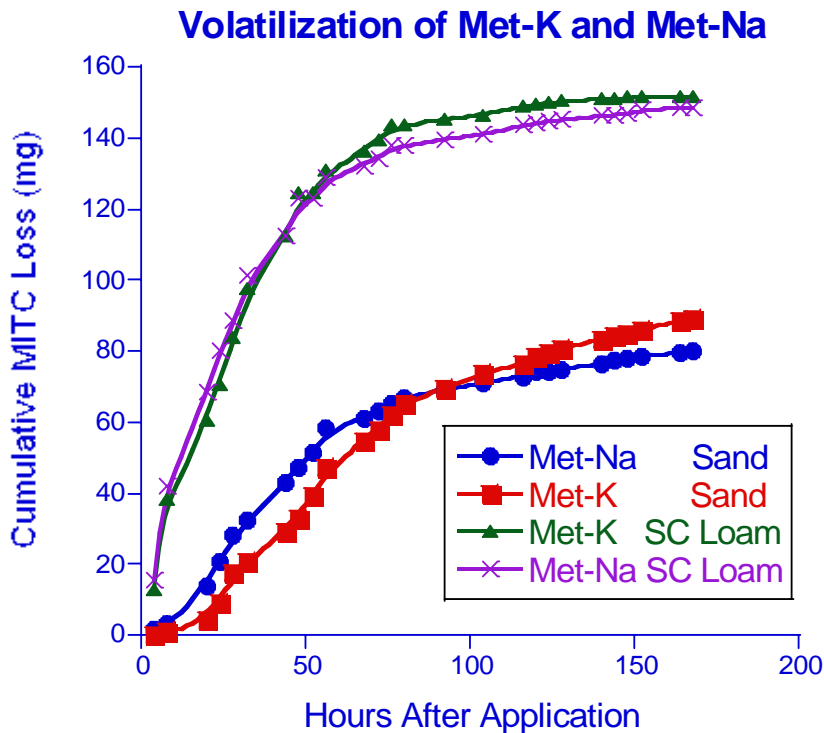


Figure 1- MITC gas samples were taken over time at 6, 24, 48, and 72 hours after Met-Na and Met-K injected at 15 cm depth from ports located along the side of each column at 15, 25, 35, 45, and 55 cm depths.