

Evaluation of Shank Injection / Incorporation of Metam-Sodium

Authors: Dr. John Radewald and David Sullivan

Applications of Metam-Sodium in the Pacific Northwest are used as a pre-plant treatment for flower bulb production. The limited availability of irrigation water requires adaptation of application methods that promote consistency in efficacy without reliance on pre-application irrigation or water sealing methods. This paper presents an evaluation of an application method developed by John Roozen of Washington Bulb Company, which includes shank injection at three depths, rototilling of the top 6 inches of the profile, and dual compaction methods to produce an effective seal. Field preparation equipment directly precedes the application rig in order to conserve moisture. This paper presents the results of a field program that was conducted in July 2003 in Mount Vernon, Washington. Study components included efficacy analysis (based on consideration of the incipient population and sampling bags), soil analysis (MITC liquid-phase concentrations, soil moisture, and soil temperature), and off-gassing analysis based on an ambient air quality monitoring network and meteorological monitoring conducted during the study. The results of this study will be presented in this paper for all components.