

## PLANT VOLATILES IN PEST CONTROL - REGULATORY ASPECTS

R. R. Stewart (1) & I. Weatherston (2)

(1) Technology Sciences Group Inc., 1101 17th Street N.W. Suite 500, Washington, D.C. 20036

rstewart@tsgusa.com

(2) Technology Sciences Group Inc., 4061 North 156th Drive, Goodyear, Arizona, 85338

iweatherston@tsgusa.com

The increasing interest in the commercial development of plant volatiles, essential oils and their constituents for use in pest control will result in challenges and issues similar to, but probably more onerous, than those faced in the commercialization of lepidopteran sex pheromones. In the regulatory area, the greater diversity of chemical structures with a resulting greater spectrum of toxicities raises some interesting questions.

We present a Flow Chart explaining how the U.S. Environmental Protection Agency regulates biopesticides, including plant volatiles and essential oils. The regulatory pathway may include exemptions from registration for "minimum risk pesticides", including several plant volatile constituents and essential oils, pesticide uses of these materials when employed in trapping or attract and kill strategies, as adjuvants in disruption formulations or as fungicidal agents. Criteria for biochemical classification, registration data requirements, and steps in the registration process are provided.