



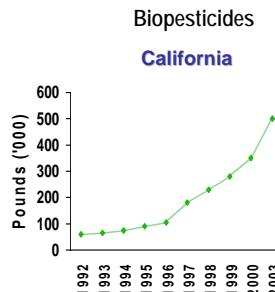
FACIN™, the new frontier

Hélène Chiasson and Nadine Beloin. Codena inc., subsidiary of AgraQuest, Inc., 1530 Drew Ave., Davis CA

Only 2 to 5% of plant species have been studied in detail for their phytochemical properties (Soejarto and Farnsworth 1989). Isolation and identification have been greatly improved with nuclear magnetic resonance (NMR) techniques (Arnason et al. 2002). The opportunity for discovery of commercially viable biopesticides from plant extracts is therefore important.

Advantages of essential oils as pest control products:

- Broad spectrum of activity
- Potential to delay resistance development
- Multiple modes of action
- Efficacy comparable to synthetic products
- Less persistent in the environment; short re-entry - safe to workers
- High safety profile
- Excellent IPM tool used in rotation with products with different modes of action
- Can be sprayed until harvest - leave no chemical residues (ideal for exports)
- Have an accelerated time to market (~3 yrs) with special regulatory process
- Uses same spray technology as the synthetic products



Consumer demand for pesticide free produce has increased the demand for safer pesticides in all markets.

FACIN is intended for the following:

- Insecticide - Lawn & Garden
- Fungicide - Lawn & Garden
- Insecticide – Turf & Ornamental
- Insecticide - Ag

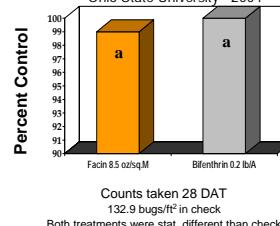
FACIN offers an excellent IPM solution for several crop protection situations whether in the greenhouse, in turf management or with the home owner. FACIN is a biopesticide product based on an essential oil extract representing a new class of acaricides and insecticides.

The plant behind FACIN : *Chenopodium ambrosioides* var. *ambrosioides*

- A proprietary mix of terpenoid compounds extracted by steam distillation from a Central American herbaceous plant
- Selection of a variety with most effective mixture of compounds that are for the most part of GRAS status
- Codena has 10 years experience in growing the plant
- Will be grown commercially in 2006

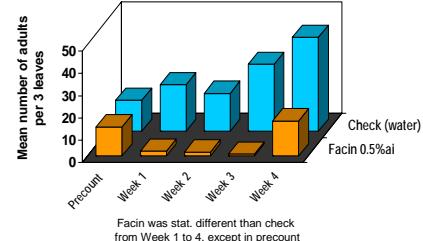
Control of Hairy Chinch Bug (*Blissus leucopterus hirta*) in Lawn using Facin & Arena

David J. Shetlar, Dan Digman & Jennifer Andon, Ohio State University - 2004



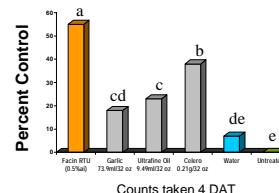
Control of Silverleaf Whitefly (*Bemisia tabaci*) strain 'Q' on Poinsettia with Facin

Ron Oetting, University of Georgia - 2006



Control of Longtailed Mealybug (*Pseudococcus longispinus*) on Coleus with Facin™

Dr. Raymond Cloyd, University of Illinois - 2005



EPA registration is expected in 2006 Q3