

AgraQuest: low-chem works

By LEN RICHARDSON

THERE is a new trend in agriculture — and like many, it started in California. No, it is not organic or sustainable, but “low-chem.” This trend to use fewer chemicals to control pests emphasizes high yield and clean crop management.

Low-chem is quite literally turning the agrochemical world upside down, and it all started here in 1995 by a Davis-based firm called AgraQuest.

“Despite the economic crisis and the maturing agrochemicals market, the market for bio-pesticides has grown globally by over 10% in 2008, owing to increasing environmental concerns and preference for chemical-free crops (mainly food crops),” reports Frost & Sullivan, a business development consulting firm in Mountain View. “To be successful, products must strike a balance between performance and being eco-friendly.”

Low-chem trend leader

In an exclusive interview with AgraQuest CEO Marcus Meadows-Smith and marketing director Sarah Reiter, Meadows-Smith observes, “AgraQuest is deliberately positioned as a low-chemical firm. The company integrates bio-pesticides and conventional chemistry with organic/IPM [integrated pest management] sectors as additional markets. Our

Key Points

- Low chem ag products are a new, fast-growing farm trend.
- AgraQuest is purposely positioned as a low-chemical firm.
- AgraQuest has grown at a compound annual rate of 37%.

focus is the mainstream ag markets with new bio-pesticides, and licensing and distribution with other companies like BASF for products like our bio-fungicide Serenade. Indeed, older, toxic pesticides are being delisted and in the European Union, 600 out of 1,000 actives have been delisted and 300 more are under review.”

“The last new mode of action in herbicides was found in the 1980s. In fungicides, only two new mode of actions have been discovered in 20 years, and one lost efficacy to resistance within three years,” adds Reiter. “80% of the insecticide market belongs to only four modes of action.”

The firm has an agrochemical division to market its farm products and a bio-innovations division to license products and technology to ancillary markets like animal health, food safety and seed treatment.

Growth leadership

Meadow-Smith says agrochem firms that have been hesitant about bio-pesticides

are no longer shy. This was confirmed when AgraQuest won the 2009 Global Frost & Sullivan Award for growth leadership, which reports AgraQuest has grown at a compound annual rate of 37% in the last five years, including 70% in 2008.

“Unlike many conventional pesticide companies, AgraQuest’s high-quality, eco-friendly products are highly compatible with chemical pesticides and can be used as a supplement, thus focusing on low-chemical agricultural markets,” says Yeshwanth Kumar, a Frost & Sullivan analyst.

AgraQuest’s BioInnovations has already out-licensed to major marketers:

- BASF is distributing Serenade fungicide in markets outside North America.

- Bayer Environmental Sciences licenses AgraQuest technology for its Natria line of green home and garden pesticides.

- BioWorks Inc. is distributing a fungicide for the horticulture market.

- Sylvan Inc. has a technology transfer agreement for a green mold product for mushrooms.

Beyond crop protection

In September 2009 AgraQuest signed an agreement to supply its proprietary strain of *Bacillus subtilis* to Alpharma Animal Health.

In January, AgraQuest launched Sympatic, a feed additive based on



LOW-CHEM LEADER: AgraQuest CEO Marcus Meadows-Smith leads a Davis-based bio-pesticide firm that has grown globally by more than 10% because of increasing environmental concerns and preference for chemical-free crops — mainly such food crops as those grown in California.

its patented, natural active ingredient *Bacillus subtilis* strain QST 713.

“Sympatic is designed to bring balance to poultry microflora,” says Michael Miille, AgraQuest president. “Additionally, it is an excellent alternative to antibiotic growth promoters.”

AgraQuest offers solutions for California specialty crops. The company introduced Requiem insecticide in 2009, which targets sucking pests and, like all AgraQuest products, is free from residue tolerances. It also has products for tomatoes, peppers, potatoes, leafy vegetables, cucurbits, strawberries, citrus, pome fruit and grapes.