Washington state’s apple growers are preparing to give up a longstanding pillar in codling moth control through a pioneering education project that also includes outreach to farm-worker and environmental groups.

The Pest Management Transition Project brings together researchers, pest-management consultants and growers in small groups that meet monthly to share ideas and experiences with replacements for Guthion (azinphos-methyl) during the organophosphate’s phaseout. Guthion, still used by many growers to control codling moth and leafrollers, may not be applied after 2012.

Funding for the two-year program, based at Washington State University’s Wenatchee research center, runs out in June, although project manager Keith Granger is seeking funding for another two years. That’s a tough sell given the state’s other budget constraints, he says.

“This is a pioneer effort,” Granger says, adding that he’s not aware of any similar programs in other apple-producing states.

Outsider involvement

A second part of the project involves parties with an interest in pesticide use other than growers, primarily environmental and farm-worker groups. “We’re getting pretty positive comments,” says assessment specialist Nadine Lehrer.

Farm workers want more pesticide information, she says. Ideas being considered include developing a poster or set of flash cards with such basic information as worker precautions and reentry intervals.

Environmental groups support the effort, though it’s not a primary focus for many, Lehrer says. Meetings with these groups have garnered interest in helping growers overcome potential barriers to adopting sustainability programs.

Grower participants last year represented 43,000 acres. Although Granger didn’t have acreage figures for this year, he says a more targeted approach has drawn more managers and decision-makers. Additional funding would allow an even broader reach.

Sharing with others

So far the project has distributed 500 copies of its handbook on various pest-control topics.

Kevin Knight, a partner in Knight Orchards of Naches, Wash., says he’s found his group’s different perspectives helpful.

“There are only so many things you can try on your own,” he says.

He’d already cut off Guthion use in his 200-acre apple, cherry and pear orchard before joining the project, but has gained tips on using alternatives. Rimon (novaluron), for example, provided disappointing results the one time he tried it.

“Now,” Knight says, “I understand how I should have gone about it.”

The project’s resources also have helped him tackle an unexpected side effect of working without Guthion. “I’m getting a lot of secondary pests I didn’t know about,” he says.

Resistance management and such secondary pests as mites and aphids are only part of the education growers need with the phaseout, Granger says. The new products also are more narrowly targeted rather than broad-spectrum killers.

“These new chemistries are different from Guthion,” says Nick Stephens, owner of Columbia IPM Inc. in Wenatchee and a regional coordinator for the project. “You can’t use them
like Guthion, especially the ovicidals."

Rimon is an insect growth regulator that also functions as a codling moth ovicide. Growers must precisely time ovicide applications with degree-day models rather than relying solely on pheromone trap catches, Stephens says.

All the Guthion replacements “are different enough that you need to know what you’re doing,” he says. “It’s removed a lot of the slop factor.”

Computer decision aids

Because accurate timing is so critical to these new controls’ success, WSU staff have included lessons using the university’s revamped computer-based Decision Aid System in group meetings.

“IT’s like having your own IT department for pest management,” Stephens says. “These guys know everything you want to know.”

Marty Robinson, manager of Wilbur-Ellis Co.’s Brewster, Wash., branch, singled out the Decision Aid System session as a highlight of his involvement with the project. “There’s so much information in there, all kinds of things I didn’t have access to before,” he says. “It’s been a great tool.”

Group meetings are geared more to growers, but that offers insight into what his customers are concerned about and what they’re learning, Robinson says. The sessions also provide participating consultants with brainstorming opportunities.

Both Robinson and Stephens say most of their customers start with a foundation of pheromone mating disruption to keep pest populations manageable. Stephens suggests blanketing blocks with hand-applied dispensers at a 400-per-acre rate.

He targets overwintering leaf rollers at several points, but particularly at petal fall with an insect growth regulator such as Rimon or Intrepid (methoxyfenozide) that does dual duty as a codling moth ovicide. “That gives you wiggle room to go back if necessary with a delayed first cover spray,” he says.

At 175 degree-days, Robinson suggests Esteem (pyriproxifen) or Intrepid, followed with an Altacor (rynaxypyr) application at 300 degree-days. A second application of either Altacor or Delegate (spinetoram), depending on which of the two was used at pre-bloom, also may be needed.

His recommendations hold neonicotinoids in reserve for later use if needed. “Most people get their pesticide cutline

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