

## Pest Control

Lack of adequate lygus bug control was identified as a major factor limiting seed production during the 1989 season. Why was lygus pressure so bad last year? The lack of effective pesticides was cited. The timing of the applications, the method of application used, the sequence of materials applied, and the interaction with other management factors (such as irrigation scheduling) were also identified. Cleanouts were 4 to 5% higher this year as a result of lygus pressure during the season. (Typically, 12 to 14% cleanout is expected.) In 1989, 10% of the seed in cleanout samples was damaged by lygus. Mites were also identified as a major pest problem in seed fields. Mite problems might not be of such concern if the lygus control sprays were more effective, specific, and less frequent.

Chemicals currently registered and used in seed production were listed during the meeting. A "wish list" of chemicals was also made to indicate those pesticides which are successfully used in other states that could be used by seed producers in California. The manufacturers of Spur® and Capture® are currently pursuing Special Local Needs (SLN) registrations for the 1990 production season. I will let you know if and when they become available.

Insecticides		Herbicides	
Registered	Desired	Registered	Desired
Supracide	Capture	Eptam	Ignite (Desiccant)
Moniter	Spur	Balan	
Lorsban	Zephyr	Treflan	
Carzol		Poast	
Thiodan		Velpar	
Comite		Karmex	
Lannate		2,4-DB	
Phosdrin		Kerb	
Pounce		Diquat (Desiccant)	
Ambush		Endothall (Desiccant)	

The California Seed Association may be able to provide assistance in the area of pesticide registration. At the same time, we need to begin looking at IPM and Bio-Control options more closely. Research of this type needs to be accomplished now to enable mechanisms to be in place if (when) additional restrictions are legislated.

There was a study done several years ago in an alfalfa seed field where no pesticides were applied during a three year period. The same grower, on adjacent land, used conventional production practices and averaged over 900 lbs. of seed/acre. On the Bio-Control plots, the average yield was less than 200 lbs./acre. We need to establish baselines such as these and evaluate inputs with respect to their economic return. With a lower level of input, seed yields may be economic below the 800 lbs./acre threshold.

Identifying and monitoring populations of both pests and beneficial insects is the key to a successful pest control program. Thresholds for application need to be established and followed to achieve the most effective level of control and reduce the number of applications, while protecting beneficial insects and pollinators.

### Non-Food Use Designation

Some states have designated alfalfa seed as a **non-food crop**, which eliminates the need for the establishment of pesticide tolerances for the registration of new chemicals, or the re-registration of existing ones. Although this expands the list of chemicals which can be used on alfalfa seed, it creates problems with disposal of screenings, since they must not enter the food chain. Screenings are considered a toxic waste and must be hauled to landfills. Where one issue is resolved, another problem may come into play, so this option needs to be considered carefully.

### Summer Field Tour

We are planning to hold a tour this summer to observe the plant spacing trial in its first year and to see leafcutter bees in action in local seed fields. Keep an eye out for notices from this office announcing the tour.