

History of Arizona High Sugar Yield
Award Winners

Robert Dennis, University of Arizona
and
Kay Allen, Amstar Corporation
Spreckels Sugar Division

Each year the Arizona Sugarbeet Growers Association and the University of Arizona present an award plaque to the grower in each beet-growing area that produced the highest yield of sugar per acre during the previous growing season. For the period 1972-1975, each individual contract was considered as an entry. Beets grown and delivered on these contracts served as the basis for determining the winning grower. For the crops harvested in 1976 and thereafter, all of a given grower's beets in the production area were included in the determination of the grower's average per acre sugar yield.

Table 1. High Sugar Yield Award Winners in Arizona, 1972-1982.

Area	Year	Growers	Sugar Yield (lbs/A)
Yuma	1973	Archie Mellon	10,465
	1974	Archie Mellon	12,965
	1975	Lee A. Consaul Co., Inc.	10,390
	1976	Barkley Co. of Arizona	8,910
	1977	Lee A. Consaul Co., Inc.	9,590
	1978	Clarence Phillips Farms, Inc.	11,010
	1979	Clarence Phillips Farms, Inc.	9,835
	1980	Clarence Phillips Farms, Inc.	12,410
	1981	Clarence Phillips Farms, Inc.	11,630
	1982	Sun Harvest	8,995
Buckeye	1972	Milo R. Smith	9,090
	1973	W.A. Heiden and Son	9,215
	1974	W.A. Heiden and Son	11,775
	1975	John E. Fornes	9,875
	1976	W.A. Heiden and Son	11,995
	1977	Hayden Farms, Inc.	9,715
	1978	W.A. Heiden and Son	9,880
	1979	W.A. Heiden and Son	9,130
	1980	W.A. Heiden and Son	10,210
	1981	Hayden Farms, Inc.	11,155
	1982	Hayden Farms, Inc.	11,175
West Maricopa	1972	Wilbur Bushong	8,050
	1973	F.C. Layton and Sons	7,765
	1974	C.P. Gould	10,250
	1975	C.P. Gould	8,075
	1976	F.C. Layton and Sons	11,825
	1977	Abel Brothers	10,315
	1978	F.C. Layton and Sons	10,930
	1979	F.C. Layton and Sons	6,275
	1980	A-Tumbling-T Ranches	7,920
	1981	A-Tumbling-T Ranches	8,340
	1982	A-Tumbling-T Ranches	6,940
Chandler	1972	Joe C. Cooper	9,540
	1973	James Sossaman and Son	9,730
	1974	Layton Farms	12,090
	1975	Richard E. Evans	10,095
	1976	Hoopes and Co.	10,665
	1977	Finley Ranches	9,705
	1978	Valley Stake Welfare Farm	8,420
	1979	Wood Farms, Inc.	7,545
	1980	Collier and Evans	7,680
	1981	Wood Farms, Inc.	11,115
	1982	Wood Farms, Inc.	9,225

Area	Year	Growers	Sugar Yield (lbs/A)
Pinal	1972	Carlotta Gilbert	7,210
	1973	Howard Holland	8,145
	1974	Philip C. Hanson	8,380
	1975	Glenn Lane	9,180
	1976	Glenn Lane	8,025
	1977	Signal Park Farms	8,270
	1978	Empire Farms Corporation	7,268
	1979	Virginia K. Holland	7,365
	1980	Layton Farms, Ltd.	8,585
	1981	R.E. Schlittenhart	7,450
	1982	Glenn Lane	8,849

Evaluation of New Synthetic Pyrethroids on Beet Armyworm

Dale Fullerton

Summary

The effectiveness of Ammo and FMC-54800 in the control of larval populations of beet armyworms was demonstrated in seedling sugarbeets. Both insecticides were tested at two rates and were equal to the control of the standard insecticide. FMC-54800 appeared to be slightly more effective than Ammo.

Sugarbeets were planted on Sept. 22 on the Mesa Experimental Farm and thinned on Oct. 13. Beet armyworm egg masses occurred early on seedling beets, however, treatable populations of larvae did not occur until Oct. 22. Populations remained high for about two weeks until cool, wet weather reduced moth activity and subsequent oviposition.

Ammo and FMC-54800 were both tested at 0.04 and 0.08 lbs/acre and compared to Lannate, the standard beet armyworm control. Pounce was added as the standard synthetic pyrethroid. Kryocide, which had looked effective in a previous test, was added to re-affirm its effectiveness.

The initial application was applied on Oct. 25 when pre-treatment counts indicated moderately high larval numbers based on the number of larvae per 10 plants. Larval increases from continued hatching of egg masses necessitated a follow-up application on Oct. 29.

Table 1 shows the treatments, application rates, larval numbers and significance for each sampling date. Both rates of Ammo and FMC-54800 reduced larval numbers below those of the untreated check and were comparable to the two standard insecticides. Kryocide did not show a significant reduction after either of the two applications. In general, FMC-54800 appeared to be slightly more effective than Ammo. While larger and more persistent populations would have been desirable, it is apparent that Ammo and FMC-54800 have potential as an effective beet armyworm insecticide.