Cooperative Extension

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Alfalfa Report

Alfalfa Report Yuma County, Arizona December 18, 2000



Production Update:

Winter Irrigation: Alfalfa water use from November through February averages about 3.5 inches per month in the low elevation desert areas. Winterrainfall cannot usually sustain maximum production in these areas and some supplemental irrigation is required. If we assume an irrigation efficiency of 0.7, then a single 5-inch irrigation every month can meet alfalfa water requirements during the winter on average. The actual irrigation requirement depends on soil type, weather conditions, rainfall, growth of the crop, and other factors. Growers sometimes use the winter as a time to replenish subsoil moisture and apply more water than is actually required by the crop during this time of the year.

Insect Management: Blue alfalfa aphid is a serious pest during the winter and spring months in the low desert. Blue alfalfa aphid is distinguished from pea aphid by uniformly dark antennae. Pea aphids have lighter antennae with dark bands at each joint. The blue alfalfa aphid first appears in December or January when it may be more abundant than pea aphid. Both species are common throughout the spring, but pea aphid is more heat tolerant and may persist into early summer. Blue alfalfa aphid and pea aphid numbers have been lower than usual for the past two years. Cowpea aphid populations have left little room for other aphid species on alfalfa. In susceptible alfalfa varieties, blue alfalfa aphid may stunt growth and infested plants have smaller leaves, shorter internodes, leaf curling, yellowing, and leaf drop. Several species of predacious bugs and parasitic wasps attack these aphids. Sample alfalfa fields weekly when aphids appear, then every 2 to 3 days as numbers approach the treatment threshold of 40 to 50 blue alfalfa aphids per stem.

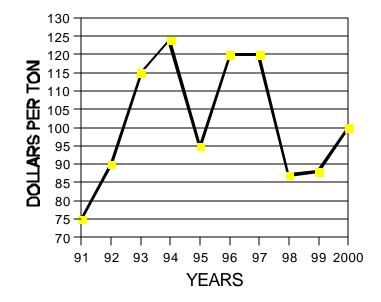
<u>Weed Control</u>: Nonionic surfactants, oil adjuvants or fertilizer adjuvants are recommended to be used with some postemergent herbicides in alfalfa. These compounds are used to help the herbicide spread, stick or enter the leaves. There are differences between them and the label should be followed to determine which to use. Crop oil concentrates are used with Select/Prism, non-ionic surfactants and nitrogen fertilizer are used with Pursuit. A surfactant used with 2,4DB and Buctril will improve weed control but cause crop injury.

Market Summary:

Past 2 Weeks (Dec. 5 to Dec. 18, 2000) Last Year (Dec. 5 to Dec. 18, 1999)

10 Year Summary (December 5 to December 18, 1991 - 2000)

| <u>High</u> | <u>Low</u> | <u>Aver.</u> | <u>Off grade</u> |
|-------------|------------|--------------|------------------|
| 105 | 90 | 100 | 70-90 |
| 90 | 85 | 88 | 45-75 |



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Imperial County Cooperative Extension

292c Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, James A. Christenson, Director, Cooperative Extension, College of Agriculture and Life Sciences, The University of Arizona.

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