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GROWING HYBRID FIELD CORN IN THE WESTERN VALLEYS OF RIVERSIDE COUNTY

Providing sufficient water is available for frequent and thorough irrigation adequate fertilizers are applied, and good varieties are chosen yields of over 100 bushels (5600 pounds) of field corn are possible in the western portion of Riverside County. Yields below this figure are, however, quite common.

SOILS: Sandy loam or heavier soil is preferred. Sandy soils are difficult to keep sufficiently wet. Alkali soils should be avoided.

VARIETIES: Based on county tests and grower experience, Pioneer 302, DeKalb 1002, long season varieties have been a consistently good yielder. For medium season corn, Northrup-King, K-3A has done well. There are other varieties which show promise but have not as yet had sufficient testing for full evaluation.

PLANTING:

Time: Begin May 1. Poor results have been secured from plantings made after the 15th of June, especially with long day corns.

How: The land should be pre-irrigated and to retain moisture should be worked into final seed bed preparation as soon as possible. Seed should be planted 2-3 inches deep (into moist soil). Some plantings are made in a lister furrow and irrigated several times before re-furrowing.

Seeding Rate: Plant about 20,000 seeds per acre (85 to 90 seeds per 50 feet of a 40 inch spaced row). The pounds of seed per acre to do this depends on the grade and will vary from 12 to 18 pounds per acre. An expected mortality of 15 to 20 percent usually reduces the total plants per acre to 17,500 to 18,000.

FERTILIZERS: A 100 bushel corn crop will use about 160 pounds of nitrogen per acre. This much nitrogen is rarely in the soil even following a crop of alfalfa. Fertilizer should be applied at, or soon after, planting. On light soils the second half of the total fertilizer requirement may be side-dressed previous to or shortly after the first irrigation.

IRRIGATION: An IMPORTANT rule is: never let corn run short of water. On some soils irrigation may be needed every seven to ten days especially from tasselling until the corn kernals begin to dent. Flat irrigation runs are desirable to permit thorough wetting of the corn ridge. Broad furrows are often useful in this regard. Under an ideal irrigation design 2 to 2½ acre feet per acre per crop may be adequate but on many soils three or more acre feet may be necessary.

PESTS: Seed is usually treated for damping off. Lindane is used where seed corn maggot is a problem. Ear worm damages corn to some extent but no chemical control is considered practical. Toxaphene has helped in some instances where fall army-worms are a problem. There is no control for boil smut.

HARVESTING: Where a 40 inch row is used, corn may be harvested with a two-row picker sheller if the moisture percent does not exceed 14 percent. If moisture is 14½ to 25% at time of harvest, corn may be picked and crib stored before shelling. Experience in the area has shown that late planted corn may not get dry enough for pick-shell harvesting for several months after the corn is mature. In this case either drying equipment may be needed after shelling or the corn must first be picked and crib stored before shelling.