

DEPTH OF PLOUGHING.

The plots ploughed three and four inches deep appeared to suffer from drouth before those ploughed six and seven inches deep. Ploughing beyond the latter depth, however, seemed of no advantage.

TIME OF PLOUGHING.

One of the most striking results observed, because it happened almost without exception, was the fact that land ploughed in the fall gave poorer returns than that which was ploughed in the spring. Similar results have been obtained in previous years, but the difference has never been so marked as was the case this year. No doubt the dry winter with its scanty rainfall was, in a great measure, responsible for these results.

MEASUREMENT OF IRRIGATION WATER.

All the water used for irrigation was measured over a weir, and a record made by a Friez self-registering instrument. An effort has always been made to ascertain the amounts of water used on each individual crop but, because of the large number of small fields, this has not always been feasible. The quantity of water used for the season was sufficient to cover the land to a depth of 1.525 feet. The depth of water on the land on the Station devoted to mixed crops for the season of 1913 may therefore be said to be 1.525 acre feet. It should be stated in this connection that a continuous flow of a fixed amount was not used. Water was obtained from the main canal at such times, and in such quantities, as we desired.

The following table, giving details regarding dates and quantities of water used on an alfalfa field of fifteen and three-quarter acres, may be of interest:—

Area of field.	Dates of Irrigation.	Amount of water used, i.e., depth of water applied.
15.75 acres.....	May 22-29 July 15-17 Sept. 25-27	664 feet. .754 " 495 "

Total depth of water applied 1 913 feet.
Average yield per acre of alfalfa..... 4 tons 230 pounds.

The rainfall during the growing season was:—

April.....	0.52 inches.
May.....	1.70 "
June.....	4.70 "
July.....	1.20 "
August.....	1.93 "
Total.....	10.14 "

The alfalfa was cut twice, and the yield of hay was 4 tons 230 pounds per acre. The irrigation in September was applied for the benefit of the 1914 crop. If the rainfall in the spring of 1914 proves to be normal, probably no irrigation will be required before the first cutting is made.