Flax did better than the others—13,155,000 bushels, just 20 per cent under 1948 but 85 per cent above the 10-year average. Yield per acre was 7.5 bushels compared to 10 bushels average in 1948.

North Dakota's 18,530,000 bushels of potatoes in 1949 was the smallest crop since 1942, and compares with 20,000,000 bushels in 1948 and the 10-year average of 17,787,000 bushels. The 1949 acreage—109,000—was smallest since 1937, but the average yield of 170 bushels per acre was largest on record.

At average prices prevailing, North Dakota's 1949 farm crops were worth about 416 million dollars, 30 per cent under 1948 and 43 per cent less than in 1947.

## IRRIGATION BRINGS NEW WEED PROBLEMS

At present we hear a good deal about the possible future of irrigation in North Dakota. The large engineering problems of construction are prominent in the early stages. Adaptation of the people to new methods and new crops is an equally large feature which may not receive as much attention because it is widely spread and not so obvious. Preparation of land for irrigation involves leveling and ditching which materially affect soil conditions. Weed problems will be different from those of nonirrigated lands. We know that in some areas most nearly comparable to ours that weeds along the ditches has been a major problem. In some areas certain weeds in fields are controlled by flooding. New weeds may appear, or old ones may become more troublesome. Adequate knowledge of the identity of weeds, how they grow and reproduce, is an essential for planning to control them as a similar knowledge of crop plants is in growing crops.—NDAC Botany News Letter.

## DATA ON FARM PRODUCTION COSTS

"Farm Production Practices, Costs and Returns" is the title of Sta-

"Farm Production Practices, Costs and Returns" is the title of Statistical Bulletin No. 83 issued by the division of farm management and costs of the Bureau of Agricultural Economics, U.S.D.A., Washington, D. C. North Dakotans will be interested in the data for "Spring Wheat Farms of the Northern Plains" of which three types are included; namely, wheat, corn, livestock farms; wheat, small grain, livestock farms; and wheat, roughage, livestock farms. The wheat, corn, livestock farms reported were located in the black prairie lands of northeastern South Dakota and southeastern North Dakota. The wheat, small grain, livestock farms were located in North Dakota. The wheat, small grain, livestock farms were located in North Dakota just west of the Red River Valley, and the wheat, roughage, livestock farms in a strip about 100 miles wide just east (or north) of the Missouri river in North and South Dakota.

All farms were commercial "family-operated" farms. The years 1930-1948 are included, reporting on an annual basis gross farm income, net farm income, operators' net farm income, index numbers of total input per unit of production, index numbers of total cost per unit of production, index numbers of prices are valued to production. All indexes are based on 1935-39 equals 100.

Included also are tables showing in dollars and/or cents operating expense per unit of production.

Included also are tables showing in dollars and/or cents operating expense per dollar of gross farm income, annual return to all labor, and return per hour for all labor used. Requests for this bulletin should be sent to the address given above.—(H. I. W.)