

in potatoes dug by conventional methods. In Alabama, samples were taken at random on two different days from washers in houses packing potatoes harvested by mechanical and conventional methods. These data showed 35 pounds of injured potatoes per 100 pounds for mechanical equipment and 34 pounds for the conventional method.

Available evidence indicates that at present the amount of physical injuries in mechanically harvested potatoes is larger than it need be. Manufacturers are continually improving their equipment to make it more dependable and to reduce the amount of damage to the potatoes. However, a number of changes and improvements often could be made in the operation of present equipment at little or no additional expense. Suggestions for reducing injuries to potatoes are discussed on page 20.

PROBLEMS ENCOUNTERED AND SUGGESTIONS FOR IMPROVING THE OPERATION OF MECHANICAL EQUIPMENT

Certain of the problems that operators have encountered and some of the ways to meet them are discussed in this section.

SELECTION OF EQUIPMENT

The selection of equipment depends upon such factors as capital available, type of equipment already owned, soil type, variety of potatoes, harvesting conditions and facilities for packing potatoes. A farmer may elect to partially mechanize because of the high initial cost of complete mechanization, or he may do so in order to avoid changing the method of hauling the potatoes or handling them at the packinghouse. On the other hand, if he has a good digger, he may elect to use an indirect harvester.

In areas where the soil is sandy, the use of direct harvesting equipment may be the most satisfactory. In areas of heavy soil, the indirect method may be more satisfactory, provided the potatoes may be exposed long enough for some drying without causing damage due to exposure.

In the Southeast, narrow headlands, short rows, drainage ditches and "pot holes" are frequently encountered, making it particularly important to consider maneuverability in selecting equipment. It is also important to consider the availability of parts and repair service in selecting equipment.