Producer Increases Returns by Reducing Potato Bruising

(A Case Study)

The Situation
Potato bruising nationally costs the potato industry tens of millions of dollars annually. This costs every potato producer in Idaho, on average, over $8,000 annually. Companies buying potatoes generally pay an incentive to producers delivering bruise-free potatoes above a specified minimum percentage, and in contrast, will generally decrease the amount paid to the producers if the potatoes do not contain a minimum specified percentage of bruise-free potatoes.

Potato producers minimize potato bruising by preventing soil clod formation during soil tillage operations and by handling potatoes carefully during harvest. About 70 percent of mechanical potato bruising can be attributed to the potato harvester. Using padded chains on the harvester and making other adjustments will help lessen bruise damage during harvest. In addition, producers need to be sure that chain speeds on their harvesters are properly adjusted to keep bruise damage to a minimum.

Our Response
The University of Idaho Cooperative Extension System has conducted workshops at the annual Idaho Potato School in January for the last several years and at summer field days the past two years. Information is presented about how to reduce potato bruising, including properly adjusting chain speeds on the harvester. This same information is also disseminated through articles in newspapers or in newsletters.

Potato producers are encouraged to contact the University of Idaho Cooperative Extension System for information and/or help with adjusting their harvesters. During the 1995 potato harvest season, William Bohl, extension educator-potatoes, initiated a harvester adjustment program helping producers adjust chain speeds on potato harvesters and windrowers.

Achievements
Following is an example of the benefits received by one producer who adjusted the chain speeds on a potato harvester. Before working with this producer, the potatoes being delivered to the buyer were only 52 percent bruise-free. This producer had a potato contract that paid $0.01 (one cent) per hundredweight (cwt.) for every percentage point of bruise-free potatoes above 56 percent.

After adjusting the chains to operate at the recommended speeds, the percentage of bruise-free potatoes increased from 52 percent to 78 percent.
With this increase in the bruise-free percentage, the producer received $0.26 (twenty six cents) more for every cwt. of potatoes that was delivered to the buyer, or $2,600 for every 10,000 cwt. contract, a truly significant monetary increase.

This is just one case to illustrate the benefits that a producer can receive by using the information disseminated by the University of Idaho Cooperative Extension System.

**Cooperators and Co-sponsors**

University of Idaho extension potato specialists and other extension educators helped with workshops and field days. Funding for the extension educator-potatoes position is partially supported by grant money from the Idaho Potato Commission.

**The Future**

Information on harvester chain speed adjustment was discussed in a recent issue of the *Spudvine* newsletter. This newsletter is produced by University of Idaho Cooperative Extension System and is sent 11 times annually to potato producers and others mainly in eastern Idaho. It is likely that this will generate more calls from potato producers for help with adjusting their harvesters during 1996. The extension educator will continue to work with producers on a one-on-one basis or encourage them to invite one or two neighbors to “mini workshops” on potato harvester chain speed adjustment.

**For More Information**

William H. Bohl, Ph.D.
Extension Educator-Potatoes
University of Idaho
Bingham County Cooperative Extension System
P.O. Box 279
Blackfoot, Idaho 83221
Voice Phone: 208-785-8060
Fax Phone: 208-785-8062
E-mail: bingham@ag.uidaho.edu

\c:/impact/impact95/po95bi01

4/96