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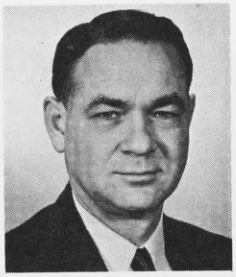
From the DIRECTOR



A. G. HAZEN

Anyone who has ever smelled the liquid by-product of the starch extraction process from potato pulp readily understands that the potato processing industry had a problem. One of our recent research undertakings at the North Dakota Agricultural Experiment Station has been a search for ways to make use of this valuable product that was troublesome to dispose of by drying and to replace the old plowdown disposal method.

North Dakota potatoes find one of their outlets to the commercial world through the starch plant at Grafton, North Dakota. Engineers at that plant knew how to dry potato pulp as a by-product of the starch making process, but also knew that the process was not economically feasible without some return. This situation posed a challenge to our animal science research staff. You will find in this issue the results of some of their research using dried potato pulp as supplemental cattle feed.

Barley is usually our least expensive energy source for livestock feed in this state. Used as directed, it can compete in cost with other feeds. But other agricultural by-products, such as dried potato pulp, may also be competitive in terms of cost per unit of energy in livestock feeds. Working toward acceptable and economical rations for feeder cattle was the objective of this particular research, and it turned out to furnish a highly acceptable disposal method as well for this sometimes unsavory smelling by-product.

At the completion of the starch extraction process, the potato pulp is about 85 per cent water and completely unsuitable for livestock feed. After drying, the material varies between 88 and 92 per cent dry matter, and mixes well in rations. The dried by-product is now available from starch companies in lots that compete favorably with other packaged feedstuffs.

Station researchers are also at work now on such other agricultural by-products as the pulp from high-sugar corn after extraction, and sunflower hulls after the oil and meal have been removed. And the search for useful methods of by-product disposal promises to continue indefinitely, along with the search for new agricultural products.

In This Issue

On The Cover: Dr. William E. Dinusson, professor of animal science, holds in the shovel a feed mixture containing dried potato pulp. For the past three years, he has supervised research at the Agricultural Experiment Station using this by-product in livestock feeds. You'll find a report of this research starting on page 12.

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