

## New chemical process makes crop residues digestible

WASHINGTON, D.C. — Three companies have been licensed by the federal government to use a new chemical process developed by a U.S. Department of Agriculture researcher for converting indigestible and often

wasted crop residues into high quality cattle feed.

The process, in which crop residues are treated with a solution of hydrogen peroxide so that cattle can digest them, is being patented by USDA and licensed through the

Department of Commerce's National Technical Information Service. It was invented by J. Michael Gould, a biochemist with USDA's Agricultural Research Service at the Northern Research Center in Peoria, Ill.

"The leaves, stalks and stems of crops like corn, wheat, oats, rice, and barley pack a lot of carbohydrate energy in the form of fibrous cellulose," said Gould.

"Normally," he explained, "the cellulose can't be efficiently

digested by cattle. A plant substance called lignin glues cellulose fibers together and shields them from bacteria in the animal's digestive tract.

"But treating the residues with hydrogen peroxide dissolves the lignin so that the digestive bacteria can reach the fibers."

Gould said that hydrogen peroxide can also be used on crop residues to facilitate the production of industrial-grade ethanol.

Ann Whitehead, patent coordinator for the agency, said Gould's invention have been granted to Food and Energy Breakthru, Madison, Wis.; Agricultural Products, St. Paul, Minn.; and Interox America, Houston, Tex. A fourth company, Southwest Bio-energy, Clovis, N.M., will probably be licensed to use the process in the near future. She said that the companies will pay a royalty to the government.

## Franklin CIA elects officers



Newly-elected officers of the Franklin County Crop Improvement Association are (seated, l to r): William Swales, Willow Hill, president; Wayne Kuhns, Chambersburg, vice-president; (standing l to r): Wayne Beidel, Newburg, secretary; Kenneth Schoenberg, Shippensburg, state director; and J. Nelson Wengert, Chambersburg, treasurer.

## Wayne County Extension elects new officers

HAMLIN — The annual re-organizational meeting of the Wayne County Cooperative Extension Executive Committee was held at J and J Lounge, Hamlin, on Jan. 7.

New officers elected for two-year terms were as follows: Robert Muller Sr., president; Fred Nordenhold, first vice-president; Philip Gottschalk, second vice-president; Marjorie Marshall, secretary; Susan Rickard, assistant secretary and Attorney Jeffrey Wander, treasurer.

New members of the committee who were elected at the annual meeting in September were introduced. They are: Marjorie Marshall, Shirley Reed, Betty Mang, Leon Reed, Debbie Bryant, Joseph Krompasky, and Louis

Mang. Catherine Johnson, Louis Mang, and Joseph Krompasky were honored for having served four years on the committee.

Jeffrey Wander and Louis Mang were appointed to represent the group on the Regional Extension Executive Committee. Dale Teeple and Lewis Locklin will serve as alternates. Jeffrey Wander was recently appointed by the Regional Executive Committee to serve as an alternate delegate to the Pennsylvania Council of Cooperative Extension Associations (state Executive Committee). Robert Muller was appointed a member of the annual meeting committee of the state association.

Earl Simons, Wayne County commissioner, and Reg Wayman,

chief clerk, Wayne County Commissioners' Office, attended the meeting and spoke to the group. They reported on county government activities including waste disposal, disaster assistance, Delaware River Basin issues, storm water management, Lake Wallenpaupack Water Management District, gypsy mill revenue sharing and the county budget.

The next meeting of the Extension Executive Committee will be held Feb. 3 in the Extension Office. It will be the annual planning meeting at which priority problem areas in the county will be identified to provide a basis for the staff to use in planning Extension activities and programs.



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