Standardized protein solubility test needed

BELTSVILLE, Md. – An extensive study of the four common methods used to determine protein insolubility indicates the need for a more accurate standardized test, says Dale R. Waldo, an animal scientist with the U.S. Department of Agriculture's Science and Education Administration.

Protein insolubility tests are used to determine the amount of protein that is not broken down in the rumen and thus is available for use directly by the animal. Feed manufacturers need these tests to determine the available protein in a particular feed, and farmers, in turn, need these analyses in providing proper nutrition for their livestock.

At the Beltsville Agricultural Research Center in Maryland, Waldo and animal scientist H. Keith Goering analyzed 15 feedstuffs: Oats, wheat middlings, barley malt sprouts, corn gluten feed, wheat bran, soybean meal, cottonseed meal, barley, dehydrated alfalfa, corn, corn hominy, corn distillers dried grains, barley brewers dried grains, beet pulp, and corn gluten meal. A minimum of ten samples of each feedstuff were tested. All feedstuffs were collected from commercial sources.

To determine protein insolubility, ground samples of each feedstuff were placed in the following: Boiling water for one hour; autoclaved rumen fluid at 39°C for six hours; 0.1 concentration of Burrough's solution at 39°C for six hours; and 0.15 molar sodium chloride at 39°C for six hours.

"The results of our study indicate that these tests vary widely in ability to predict protein undegradability. The correlations between methods were low and extremely variable," says Waldo. "So far, highest test correlations with protein use by animals were with the autoclaved rumen fluid. However, more extensive animal tests are needed with a larger variety of feedstuffs to determine the accuracy of this method."

Who runs our schools?

HARRISBURG — The Pennsylvania School Boards Association has announced a statewide series of public forums to be held in 10 geographic locations throughout the state, beginning with a meeting here at the Pennsylvania State Museum on Sept. 12. All meetings begin at 7:30 p.m. and will end by 9 p.m.

The meeeting in Harrisburg is for the Harrisburg area, including southeastern and south-central portions of the state. Other meeting times and places may be obtained by contacting the Pennsylvania School Boards Association, 412 North Second Street, Harrisburg, Pa., 17101, phone 717-233-1642.

The forums are intended to engage the public in discusssion around the topic "Who Runs Our Schools?" Meetings are open to the public.

Hooked rug course starting

MEDIA - Learn the art of rug hooking. Dyeing of wool to achieve the exact colors you need will also be taught. This workshop will begin on September 21 and meet on Sept 28, Oct 5, 12, 19, 26, Nov 2, 9, 16, and 30 in the Toal Building Auditorium from 10 a.m. to noon.

The $20. fee is due September 14. Make checks payable to Home Economics Workshops and send to Maryetta Duffner, Toal Building, 2nd and Orange Streets, Media, Pa. 19063. This includes the printed materials. Mary Tilson will be the instructor.

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When normal conversation is difficult to hear clearly at a distance of three feet or less, the sound level may be hazardous to human hearing ability, warns the Beltone Crusade for Hearing Conservation. Persons working in such environments should be provided with protective ear devices, the Crusade officials add.