Infrared crop analyzer to be demonstrated

ROCK SPRINGS — A revolutionary new crop analyzer, able to determine quickly the nutrient value of animal feeds and cereal grains, will be demonstrated during Ag Progress Days Tuesday through Thursday at Penn State's Agricultural Research Center.

Known as an "infrared spectro computer," the instrument scans grains and forages within two minutes for nutrient content such as protein and fiber, total digestible nutrients, and per cent of dry matter. The instrument was developed by John S. Shenk and associates at Penn State, and personnel at the USDA's Regional Pasture Research Laboratory, University Park.

The scanner will be demonstrated at various times during Ag Progress Days, to be held at the research center nine miles west of State College on Rt. 45 The new instrument will gradually replace the present technique of chemical and mathematical analysis, it was pointed out, since it saves considerable time and money.

Shenk believes the infrared instrument may eventually be available to livestock feeders through county agents' offices, feed stores, or hay marketing centers

"We need to show people how the analysis works and how it can help farmers," Shenk stated. "People in the agricultural industry, including farmers and livestock feeds, must work with the technology before they understand it and apply it to their operations," he added.

This summer the infrared scanner is being demonstrated in a mobile van equipped with a microwave oven for drying grasses and other high moisture materials The van is pulled right into fields where it shows, within 10 minutes including drying time, the protein content of forages such as orchardgrass and alfalfa

The van is a total unit for analyzing high moisture grasses and legumes as well as dry feeds, Shenk commented. The system attracted considerable interest during May and June when it was shown at hay markets in Belleville and New Wilmington And it was demonstrated recently at events similar to Ag Progress Days in Michigan and Wisconsin.

The Penn State team that developed this "infrared spectro computer" believes it can be quite versatile For example, weight gains and milk production might be predicted directly from forage samples rather than indirectly from the time-consuming chemical and mathematical methods now used.

The computer will also come in handy, it was noted, to update the nutritional value of feed and forage fed to cows in the Dairy Herd Improvement Association program (DHIA).

Based on the studies at Penn State, a national project has been established through the U S Department of agriculture — using the type of equipment developed at University Park Scientists are cooperating from USDA laboratories at Beltsville, Md, Athens, Ga, and El Reno, Ok — with additional research at the University of Minnesota and the University of Utah.

Shenk and associates are responsible for general as well as specific aspects of this national program on infrared analysis of forage and feed

Grand Duke and Sweet Mama at Ag Progress

ROCK SPRINGS — Names like "Sugar Snap," Grand Duke", "Sweet Mama" and "Gold Rush" sound like thoroughbred race horses, but they aren't.

They are new vegetable varieties to be featured in All-America Selection trials during Penn State's Agricultural Progress Days next week.

Winners of the 1979 and 1980 All-America Selection (AAS) honors will be featured, in addition to a 1981 delegate. In charge of the plots is Peter A. Ferretti, associate professor of horticultural extension and an official judge for AAS vegetable ratings.

Six new varieties won awards in 1979—a gold medal to a snap bean named "Sugar Snap," a silver medal to "Grand Duke" hybrid kohlrabi, and bronze medals to "Sweet Mama" and "Early Butternut" hybrid winter squash, "Saladin" hybrid cucumber, and "Dutch Treat" sweet pepper.

The 1980 bronze medal winner was "Gold Rush", a zucchini squash with a bright golden skin and a mint-green stem.

The Penn State variety trials will contain several hundred plot-rows of various vegetables, making an acre of plantings, Ferretti reported Included will be tomatoes, "extra sweet" sweet corn, beans, peas, melons, sweet peppers, eggplants, turnips, broccoli, lettuce, carrots, spinach, endive, parsley, Chinese cabbage, leeks, and okra.

In addition, 18 plots will contain official cucumber, squash, and pumpkin entries in All-American competition with additional comparisons. Every vegetable variety will be duplicated twice, Ferretti announced.

The Penn State Extension specialist is one of about 30 vegetable judges in the AAS organization serving the United States and Canada

Ag Progress Days is sponsored annually by the College of Agriculture. Cooperating are farm equipment dealers and other businesses supplying farm products, The Pennsylvania Grassland Council, and state and federal agencies.

Ag Progress Days is an official part of the 125th anniversary celebration of Penn State.

The three-day event will be held at the Rock Springs Agricultural Research Center of Penn State, nine miles west of State College on Rt. 45.

Check your pressure canner

ROCK SPRINGS — If you plan to put your pressure canner to hard use this summer and it is the dial guage type, be sure it is properly adjusted before you begin The dial guage, an indicator of the pressure inside the canner, must be checked with a maximum thermometer to guarantee accurate readings

As a service to you, Extension home economists at Ag Progress Days will be equipped to check your dial guage canner Just bring your canner lid by the Family Living Tent on Tuesday through Thursday Extension staff will check your guage, free of charge, and you will be assured that your canning time and energy will result in well-preserved food products

Ag Progress Days are held at Penn State's Rock Springs Agricultural Research Center, on Route 45, 9 miles west of State College Admission is free.

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