Proper combine adjustment aids harvest

As small grain farmers swing into high gear during this year's harvest season, many will experience some loss of grain crop due to poor combine adjustment.

This loss may seem small when looking at the loss from a particular field. But over the harvesting season the combine's grain losses represent a significant cost due to lost time, labor, seed, chemicals, land use, and machinery value.

Gary L. Smith, extension agricultural engineering specialist at the University of Maryland, suggests that grain loss due to the combine can be minimized by proper calibration. Smith offers the following pointers for calibrating combines:

First, determine the preharvest grain loss. Pick an area of the grain field that is a good representation of the entire field. You should pick a minimum area of ten square feet Count the number of seeds on the ground ahead of the combine in your pre-selected area This will determine your preharvest loss.

Next, determine header loss. Run the combine over a small portion of the preselected area and count the number of seeds on the ground behind the header. Subtract the seed count in the preharvest lost from the seed count of grain behind the header. This figure represents the seed loss attributed to the header. Adjusting the header will minimize the amount of grain that is lost at the header.

Then, combine the grain in the preselected area Ground speed should be between 3.5 and 4.5 MPH. The operator must make sure he or she is cutting the grain at the correct height.

To figure threshing loss, count the seeds on the ground after the combine cuts the grain in the preselected area.

Add the seed count in the preharvest loss to the seed count in the header loss and subtract this figure from the amount of seeds that are left on the ground after combining This gives you the threshing loss of the combine. Threshing loss can be minimized by adjusting the sieves and/or fan of the combine.

The net loss of the combine can be calculated by adding the seed count of the grain left behind the header to the seed count of the grain left after combining the preselected area. From this total subtract the seed count of the grain on the ground before combining. This gives you your net machine loss.

Dividing the net machine loss by the area of the preselected spot of the field in square feet will give you the amount of grain loss per square feet By consulting the bushel-per-acre chart you can determine your loss in terms of bushels per acre.

At some point in harvesting check the grain bin for contamination This check will determine if the

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PREHARVEST AND HEADER LOSS CHART—SMALL GRAINS

(Approximate Number Of Kernels Per Square Foot To Equal One Bushel Per Acre)

Crop	Kernels Per Sq. Ft.
Barley	13-15
Beans-Red Kidney	1.2-1.6
Beans-White Pea	3-4
Oats	10-12
Rice	29-31
Rye	21-24
Sorghum	19-22
Soybeans	4-5
Wheat	18-20

To figure grain loss in bushels per acres, divide the number of seeds per square foot in sample test area by the above number for specific grain being harvested.

York hog show

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East Berlin and Tim Ferrence of Spring Grove went to Thomas for 57 and 58 cents.

Other single buyers of class winners were Godfrey Brothers, of York who paid 57 cents to Shelly Bankert of Red Lion R3, and Gordon Snyder Feed Company at Brodbecks, which purchased Brian Bankert's entry for 57 cents.

A total of 65 head of 4-H market hogs were exhibited during the afternoon show and evening sale. Judge for the roundup was Dennis Grumbine, Lebanon County hog breeder A second roundup will be held during late summer