

## Smith Warns On Liquid Fertilizer Promotion In Lancaster County

Many farmers are becoming interested in liquid fertilizers to be used in place of the dry forms of plant nutrients, County Agent Max M. Smith said this week.

Since many questions on the value and use of this form of plant food have come to the extension office, Smith said he feels there is a great deal of misinformation and misunderstanding about the use of liquid plant food.

In the first place, he said, liquid mixed fertilizers are plant nutrient materials in a liquid form; this liquid may contain various combinations of nitrogen, phosphoric acid, and potash. Dry fertilizers also contain various combinations of the same plant nutrient materials plus a carrier. If liquid fertilizer and dry fertilizer are applied in equivalent amounts, and in the same manner, there would usually be little or no difference in crop growth.

Many growers are using liquid forms of fertilizer because it can be handled best by mechanical means with a minimum of labor, it can and should be placed properly in the soil the same as dry forms of fertilizer. However, special liquid fertilizer equipment must be purchased, or custom application used, according to Smith.

Some reports seem to indicate that liquid fertilizer may be used as a foliar spray (on the leaf surface) to provide the needed plant nutrients. This method of application has been practiced but usually is a poor substitute for plant nutrients applied to the soil. Experiments conducted by many state experiment stations have proven that applications of nitrogen, phosphorus, and potash to be ineffective as a spray on the leaves of field crops. Plant leaves can absorb only small amounts of nutrients; to provide the amount needed would require many applications. Also, leaf injury from foliar applied fertilizer solutions is a problem unless under the guidance of crop experts.

Another practice that is being promoted by some local fertilizer concerns, is a seed treatment with a complete liquid fertilizer before planting. This is not a good practice and research findings to date show no advantage. It can actually prove detrimental to germination. Liquid fertilizers may be used as a starter solution but usually are more expensive than other forms dissolved in water.

### COMBINE BRINGS \$5,180 AT ESBENSHADE SALE

A Combine brought \$5,180 at the Adam B. Esbenshade sale near New Holland last Tuesday. A Farmall tractor brought \$1,890 and a Ford tractor sold for \$1,880.

The top cow in the herd sold for \$810 and the second cow brought \$630. A five month old heifer calf changed hands at \$235, and the entire herd of 30 cows averaged \$370 per head.

Hay brought \$56.50 per ton and corn \$41.50 per ton.

Other items and their selling prices included a self unloading wagon, \$900, a M-F tractor, \$660; Farmall "C" tractor, \$735; Baler, \$815, hay crusher, \$422, disc, \$220, drill, \$250, manure loader, \$225, milkers, \$70 to \$95, milk cans, \$7; silage, \$19 per foot, pony, \$180, shoats, \$13 each, and a copper kettle, \$42.

The degree of acidity of the soil should not be any different for dry forms of fertilizer, or for liquid fertilizer. It has been well established that most field crops do best at a pH of 6.5 to 7.0 (exceptions might be potatoes at lower pH levels and legumes at higher readings). Complete soil tests should be made to determine the amount of lime needed. The suggestion of spreading excessive amounts of ground limestone (5 to 15 Tons per acre) is faulty and should not be done.

In summary, liquid fertilizers are as good as, but no better than, dry fertilizers if — (1) It is applied to the soil, (2) equivalent amounts of plant food are applied, and (3) they are placed in the soil in the same manner, Smith said.

## Breeders Institute Is Scheduled; To Feature Three Dairy Experts

A trio of nationally prominent dairy authorities, Dr. Carl F. Huffman, East Lansing, Michigan; Harvey C. Dreibelbis, Colts Neck, New Jersey; and George R. McLaughlin, Beavertown, Ontario will be speakers for the third annual Breeder Institute sponsored by the Pennsylvania Holstein Association. Local dairymen are invited to attend one of six regional meetings on March 18, 10:30 A.M. at Holtzschwamm Church, Thompsville R1 (on Rt. 234 - 10 miles west of York), according to Victor Plastow, Associate County Agent.

Dr. Huffman spent 39 years looking into the digestive process of dairy cattle at Michigan State University. His findings brought Michigan acclaim as a leading state in this field and during his career the

diminutive scientist won about all the honors that were within reach. In presenting his subject "Roaming Through the Rumen" he will be relating his findings of the interior workings of the dairy cow.

Harvey C. Dreibelbis, farm manager of the nationally famous Hominy Hill Guernsey Farms where since established in 1941 has completed a total of 80 class leader records, including 13 national production records. Equally impressive have been the ribbons and trophies received for prize winning hay exhibits at both state and national shows. Being a firm believer in proper individual cow care, Mr. Dreibelbis has selected for his sub-

ject "Managing the Dairy Herd".

George R. McLaughlin, owner-manager of the prominent Elmcroft Holstein Farms is one of Canada's most influential young men in agriculture. An immediate past-president of the Canadian Holstein Friesian Association, McLaughlin recently gained fame when his consignment topped the Royal Winter Fair Sale of Stars at \$16,500. He will be discussing "Selective Breeding and Herd Development".

Following their individual presentations the speakers will appear on a panel to answer questions. Plastow urges all dairymen, regardless of their favorite breed of cattle to attend. He said, "It is a rare occasion to witness this calibre of a program in our area."

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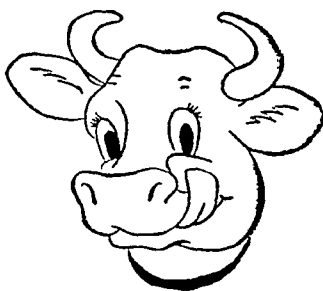


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