

Do your crops need Manganese?

NEWARK, Del. — High prices and narrow profit margins are forcing growers to consider every aspect of fertility management to get the best return on investment. One aspect of fertility management which concerns many farmers is the possibility of micronutrient deficiency.

In Delaware, the most commonly observed micronutrient found deficient is manganese, especially in soybeans and occasionally in corn.

Manganese deficiency usually occurs on high pH soils and is usually associated with over-liming, says University of Delaware extension soils specialist Leo Cotnor.

It is seldom observed at soil pH values under 5.8, becomes more prevalent at pH 6.0, and most often is found at soil pH values over 6.5. This is especially so on sandy soil. At pH 6.0, for example, manganese deficiency is much more likely to occur on a loamy and than on a silt loam.

One of the best ways of preventing manganese deficiency is to monitor soil pH carefully and avoid over-liming.

Loamy sand soils should not be limited than 6.2 while silt loams should be kept at around 6.3 to 6.5

This may be a problem on loamy sands, where a ton of lime (often considered the lowest amount that can feasibly be applied) may get soil pH values over 6.2.

On soils with known histories of manganese deficiency, lime applications of less than one ton should be considered, says the specialist.

Manganese deficiency in soybeans is rather easily recognized. The new growth turns yellow. Only in extreme cases will entire plants be yellow. In many instances, mild manganese deficiency symptoms will disappear as the roots reach more acid subsoil. In corn, manganese deficiency generally results in an overall light green color.

The most effective way of correcting manganese deficiencies is by the use of foliar sprays.

One to two pounds of actual manganese as manganous sulfate in 20 gallons of water applied when deficiency symptoms are first observed is very effective. A second spray application two or three

weeks later may be needed. Some burn may occur if the spray is applied in mid-day but it is seldom serious.

The most effective method of application is as a band. This requires 8 to 10 pounds of actual manganese per acre. As the deficiency results from soil conditions which convert manganese to unavailable forms rather than from an actual lack of total manganese, broadcast applications are the least effective way of applying this nutrient.

When broadcast, manganese must be applied at the rate of at least 40 pounds per acre. Even this rate may not be very effective on high pH soils. It will not "carry-over" and will need to be repeated yearly.

In cases of mild deficiency, banding of an acid fertilizer may be

beneficial. Fertilizers formulated with ammonium sulfate provide enough soil acidity in the vicinity of the roots to convert unavailable manganese to the available form.

Davidsburg 4-H Club

DOVER — The March meeting of the Davidsburg 4-H Club was held recently.

The Club will clean up assigned roads on April 26. Junior Fun Night will be April 11, 7 p.m. - 9.30 p.m. The club will be constructing an obstacle course at Paradise Elementary's

Spring Spree, May 17, 3 p.m. - 7 p.m. Also, the club is in charge of the baked good stand at the 4-H Auction, March 28, 6 p.m., at the 4-H Center at Bair. Preparations should be made for the May talent show.

The next meeting will be April 17.

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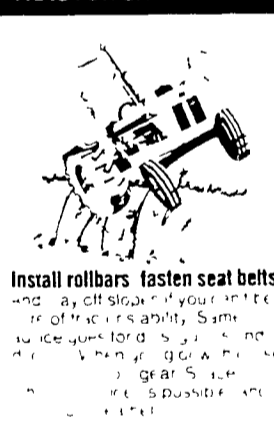
LANCASTER — The number of sheep and lambs on feed in seven selected States on March 1, 1980 totaled 597 thousand head, down one percent from the 604 thousand head on feed a year ago.

There were 287 thousand placed on feed during January and February this year, down 6 percent from the 306 thousand placed during the same period of 1979.

Of the total number of feed March 1, 1980, in the seven States: 9 percent weighed less than 70 pounds, 7 percent weighed 70 to 79 pounds, 14 percent weighed 80 to 89 pounds, 26 percent weighed 90 to 99 pounds, 44 percent weighed 100 pounds and over

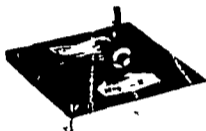
The early lamb crop in California, Kansas and Texas totaled 1.44 million head, up one percent from a year ago. The January 1 inventory of ewes one year old and older for these States was up less than one percent.

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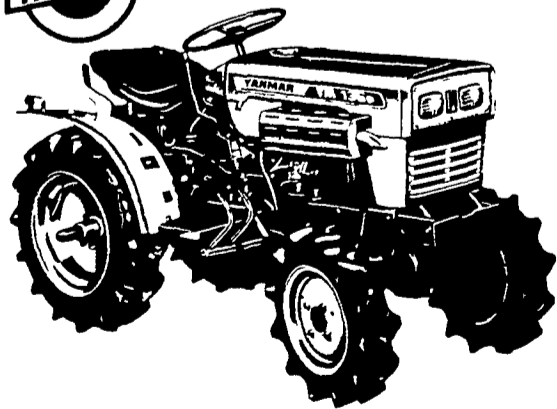
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Yield Bulletin

Yield Results from the Pa Five Acre Corn Club show Dekalb's XL-55A is a big yielder at harvest. Ray Diebold (center), RD #3, Altoona, Pa shows his trophy to Dale Furry, his Dekalb Dealer and Herb Ayres, Dekalb District Manager.

Diebold's yield with XL-55A was 207.9 bushels of dry Shelled Corn.

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