

FARMERS COOPERATIVE



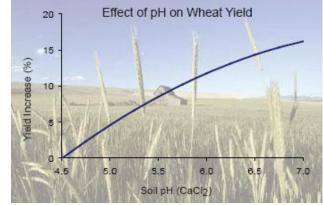
Top Dress Season Is Here

With commodity prices being low you would want to make sure you maximize your bushels so that you can still make a profit. First start by soil sampling because it could help you save money and not over fertilizing. Then plan your applications early for top dressing and or weed control. This is going to be a wet winter so we need to be in the fields soon as there dry enough.

In the dry environment it may take up to one year before the lime applied has completely corrected the soil acidity problem. Aluminum and manganese toxicity is the greatest issue associated with soil acidity. Available aluminum, a

predominant mineral in the regions soils, is pH dependent. A change of 1.0 pH level changes available Al by 1000 fold. For example, a soil with a pH of 5.0 will have an approximate Al concentration of 27 ppm, critical level of winter wheat is 27 ppm, while a soil with a pH of 4.0 will have an Al concentration of approximately 27,000 ppm.

Aluminum and manganese toxicity does not only impact grain yield but it has an even greater impact on biomass production. Lime raises the pH level which lowers the Aluminum levels back down. However, gypsum does not change the pH levels but will lower the Aluminum levels.



Gypsum is great for no till ground because it reaches down into the soil up to 10" where lime want go any farther then where you apply it. With this being said don't lime no till ground because it's not as effective as gypsum is for no till. Lime has to be cultivated to work more efficiency. Correcting soil acidity with lime, increased wheat grain yield by 82% and increased forage production by 150%.

WHEAT						
PH	TONS OF LIME	PROJECTED PH	PROJECTED BU	\$LIME/ACRE	ACRES	TOTAL PRICE
4.3	2 TONS/ACRE	5.7	42 BU	\$27	80	\$4,320
4.3	1 TONS/ACRE	5	35 BU	\$27	80	\$2,160
4.3	0 TONS ACRE	4.3	25 BU	\$27	80	\$0
		PROJECTED	\$ LIME MINUS			
	WHEAT PRICE	WHEAT CROP	WHEAT CROP	RETURN/ACRE		
	\$4.22	\$14,179.00	\$9,859.00	\$123.23		
	\$4.22	\$11,816.00	\$9,656.00	\$120.70		
	\$4.22	\$8,440.00	\$8,440.00	\$105.50		

As you can see from above it pays to put down lime. Fertilizers and chemicals will not work efficiently in low pH levels. pH levels 5.5 and below causes wheat to not preform to its maximum abilities.

The Farmers Cooperative is doing a test plot for top dressing in wheat this year. We are going to split the field in 4 and in half the field put down urea 185 lbs./acre one strip with Agriotain and one without. Then put down 28 gallons/acre of UAN in split applications with one strip of Nutrisphere and one without. Agriotain and Nutrisphere are inhibitors that allow the nitrogen to break down much slower to decrease leaching and evaporation. This helps nitrogen stay in the soil making it more available to the crop. in w We will later harvest our strips and collect the data and send it out in a newsletter.

ANY QUESTIONS CONTACT OFFICE (580)363-0689