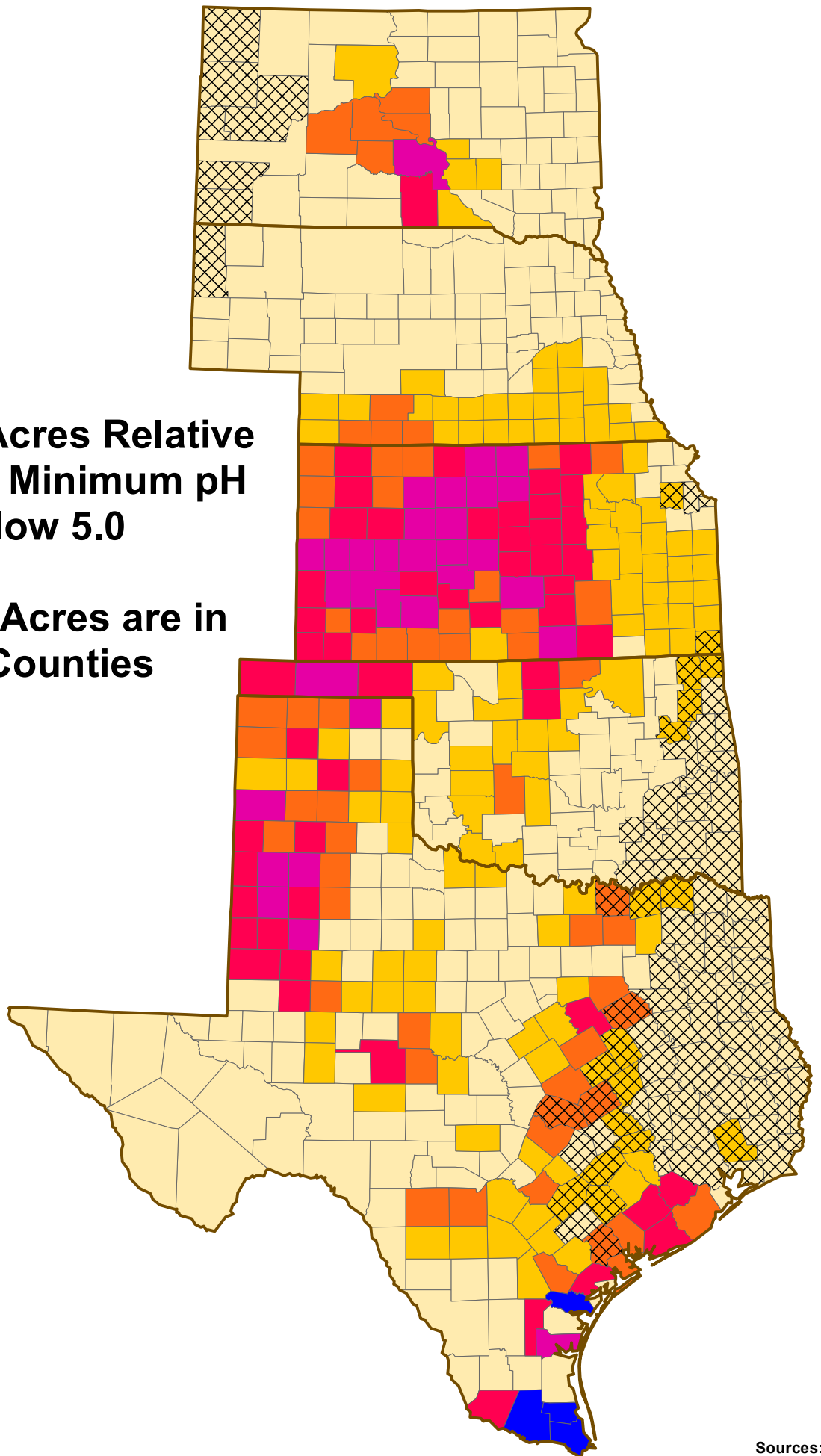
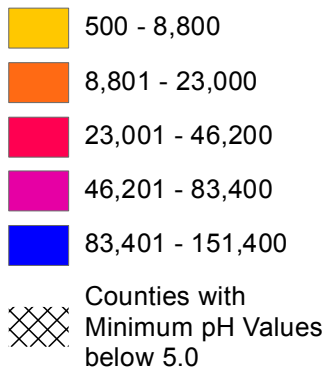


Grain Sorghum Acres Relative to Counties with Minimum pH Values below 5.0

97.6 Percent of Acres are in Higher-pH Counties

Acres by County



**Number of Acres in Counties Where
Minimum pH Values are below 5.0**

County	Acres
Kansas	
Cherokee	2,000
Jefferson	1,500
Oklahoma	
Craig	950
Mayes	1,100
Ottawa	2,100
Wagoner	1,275
Texas	
Burleson	4,550
Falls	8,575
Fannin	4,580
Fayette	600
Gonzales	1,350
Grayson	9,640
Lamar	6,325
Lavaca	1,200
Liberty	7,400
Limestone	4,200
Milam	12,920
Navarro	12,800
Robertson	6,450
Victoria	19,380
Washington	1,200
Williamson	22,633
Total	132,728

March 18, 2014

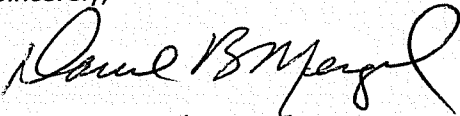
RE: Lime Use in Sorghum Production in Kansas.

Grain sorghum is an important crop in Kansas produced primarily under dryland, non-irrigated, conditions in Central and Western Kansas. It is grown due to its high level and heat and drought stress tolerance. It is commonly grown in rotations with wheat, or in Western Kansas in wheat, sorghum fallow rotation systems. The soils used for dryland crop production in Western Kansas are commonly high in soil pH, and many contain free lime. In this area, ag lime is rarely used, and is not readily available to growers. A five year summary of soil samples received by our soil testing lab from Western Kansas shows that well over 95% of the samples received had pH's above 5.6, and would not require lime for sorghum or wheat.

Central Kansas is a higher rainfall area, has a longer cropping history, and a broader variety of crops are grown. Sorghum is commonly grown in rotation with wheat and soybeans, and alfalfa is also grown periodically on many of these fields. Both soybeans and alfalfa are more sensitive to acid soils than sorghum or wheat. Soil pH is more variable across this area than Western Kansas, and many soils are limed, generally prior to planting soybeans and alfalfa as these crops are much more sensitive to acid soils than sorghum. Lime is not widely used in this region in sorghum production. Our soil sample summary data shows that over 80% of the samples from Central Kansas had soil pH >5.6 and would not need lime for economic wheat or sorghum production.

If you have further questions feel free to contact me directly.

Sincerely,



David B. Mengel
Professor of Agronomy
President, American Society of Agronomy

March 6, 2014

To Whom it May Concern,

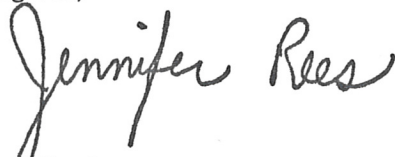
I am writing to you regarding the use of lime in sorghum production in the state of Nebraska. For nearly 10 years I have served as the UNL Extension Educator in Clay County, Nebraska where I focus on irrigated crop production, plant pathology and on-farm research in corn and sorghum. I have conducted research on the crop, and I have also spoken on sorghum agronomics at a number of crop production events.

I also consulted with my colleague Dr. Charles Wortmann, Professor in the Agronomy and Horticulture Department at UNL. He has degrees in agronomy, soil science, and crop science. His research and extension programs specialize in more profitable and environmentally safe nutrient management, improvement of no-till systems, energy-efficient biofuel production, and support to sorghum research in eastern and southern Africa.

With our education, research, and experience, we feel we are highly qualified to discuss lime use in sorghum production. Lime is a soil amendment used to treat acidic or lower pH soils. Virtually the entire Nebraska sorghum crop, including for production for fuel ethanol, in the State is grown on soils where acidity is not a major constraint to productivity. As a result, lime is not used in sorghum production in Nebraska.

Thank you for the opportunity to provide input.

Regards,



Jennifer Rees
UNL Extension Educator

OKLAHOMA STATE UNIVERSITY



Division of Agricultural Sciences & Natural Resources
Oklahoma Agricultural Experiment Stations
Field & Research Services Unit
Oklahoma Panhandle Research & Extension Center
Route 1, Box 86M Goodwell, OK 73939-9705
580-349-5440 Fax: 580-349-5442
<http://oaes.pss.okstate.edu/goodwell>

March 24, 2014

National Sorghum Producers
4201 North Interstate-27
Lubbock, TX. 79403

To Whom It May Concern:

I was asked to write a letter concerning lime use in the high plains region, where grain sorghum has been traditionally grown. There is no lime utilized in grain sorghum production in the high plains due to high pH values of the soil. The pH values in the region range from 6.5 to 8.5. Most of the grain sorghum is grown on soil with pH values of between 7.0 and 7.8, which is almost ideal for grain sorghum production. Lime applications would not be recommended unless soil pH values are below 5.5.

Sincerely

Rick Kochenower

A handwritten signature in black ink, appearing to read 'Rick Kochenower', with a long horizontal line extending to the right.

Area Research and Extension Specialist (agronomy)
rick.kochenower@okstate.edu
580-349-5441



South Dakota
State University

Dakota Lakes Research Center
P.O. Box 2
Pierre, SD 57501

17 Miles East of Pierre on Hwy 34

Office Phone: 605-224-6114
Farm Phone: 605-224-6357

RE: Use of lime in sorghum production in South Dakota

There is no need for the use of lime to correct low pH conditions in the predominant sorghum growing regions of South Dakota. In fact, in many of these areas, lime is probably considered to be slightly in excess. Even in the more humid eastern part of the State where sorghum is a minor crop at this point, lime applications are not routine.

Recent increases in the installation of drainage tile in the far eastern part of the State may eventually lead to the need for applications in the future. There are adequate supplies of lime at depth in almost all areas of the State so inclusion of a perennial sequence in the cropping system will be able to correct surface pH issues.

March 24, 2014

To whom it may concern:

Sorghum is an important crop to the agricultural economies of the Texas Panhandle and Texas South Plains. Over 61 million bushels of sorghum, approximately 16 percent of the U.S. crop, was produced by farmers in these two regions. A significant portion of this production is sourced by the region's ethanol plants.

Soils of the Texas Panhandle and Texas South Plains are neutral to alkaline (non-acidic) clay loams and sandy loams. As such, regional farmers do not apply lime to increase/modify soil pH. As the Texas A&M AgriLife Extension Agronomists, we appreciate the opportunity to clarify the use of lime in these regions.

Regards,



Jourdan M. Bell, Ph.D.
Assistant Professor and Extension Agronomist



Calvin Trostle, Ph.D.
Professor and Extension Agronomist

Texas A&M AgriLife Research and Extension Center at Amarillo
Texas A&M AgriLife Extension Service
6500 Amarillo Boulevard West | Amarillo, Texas 79106

Tel. 806-677-5600 | Fax. 806-677-5644 | amarillo.tamu.edu