Agronomist Explains the Basics of Soil pH and Lime

Soils in our humid southern climate are naturally acidic and some old-timers often referred to soil needing to be "sweet" for good plant growth. This expression most often relates to the use of lime to correct our acidic soils.

Guest column by Jagathi Kamalakanthan, NCDA&CS soil lab agronomist

Lime is commonly used by farmers and home gardeners to help soils obtain a proper pH level for optimal growth.

Acidity is usually referenced by the pH scale which indicates the intensity or

concentration of acid. Values range from 0 to 14, with lower values being more acidic. Above a pH of 7, we refer to conditions being basic or alkaline. Pure water has a pH of 7, which is referred to as neutral, having an equal balance of acid and base. Vinegar, which is acidic, has a pH between 2 and 3. Bleach is a known basic/alkaline solution with a pH of around 12. Lime is used to raise pH and lower soil acidity, plus it supplies calcium and magne-

sium depending on the source used. Too much soil acidity injures plant roots and affects their ability to take up nutrients and water. A lower than desired pH lessens nutrient availability and decreases populations of soil microorganisms that benefit plant growth. The proper pH for plant growth is one that keeps the right balance of nutrients available for plant growth without being too acidic for root injury. This varies for dif-Tomatoes, boxwoods and roses are plant species known to prefer pH near 6.5.

Flowering annuals and most other vegetable plants grow well at a pH level at or near 6.0. Typically, a pH range of 6.0 to 6.5 is considered preferable for most plants, except for acid-loving ones. Blueberries, azaleas and rhododendrons are among the plants that desire a pH of

around 5.0. Most turf grasses do well at pH level of 6.0 to 6.5, except for centipede where a 5.5 is preferable. A question we often get asked is, "if I know my pH, how much lime do I have to

add to get a pH of 6.0?" There is no way to accurately predict lime needs based only on soil pH. Soil pH is an indicator of soil acidity, but it is not a measure of potential acidity coming from the soil itself. The actual amount of lime will vary depending on the soil's physical composition - sand, silt and clay plus the abundance of soil organic matter. "An accurate lime rate can only be determined by a soil testing lab that measures the acidity associated with the surface of soil particles, in addition to soil pH," Kamalakanthan said. Lime can be applied at any time of the year. Since lime takes about a year to fully

react, it is ideally best applied a few months ahead of planting. "It will start reacting as soon as applied, especially if mixed with the soil," Kamalakanthan said. Here in North Carolina, you can apply lime anytime of the year. If needed, liming ahead of planting a flower bed or vegetable garden is certainly advised. If soil pH is very low, surface applications of lime will not provide as much benefit as mixing into the soil. Another misleading belief is that lime cannot be over-applied. Lime should typically not be applied every year and the correct rate is important. Usually soils will need

lime application every two to four years. This will vary depending on soil type and management. Soil acidity in very sandy soils typically re-occurs faster than in more clayey soils, so sandy soils need to be tested for lime needs more frequently (every two years) than clay soils (every three to four years). Lastly, let's discuss lime sources. Calcitic lime contains only calcium limestone and dolomitic lime contains calcium and magnesium limestones. Magnesium is an essential

nutrient and can be needed especially in sandy soils of our coastal plain region. Calcitic lime can best be used in soils with more clay that better hold nutrients. Soil testing can help identify the need for magnesium to help determine which lime source is best. To correct soil acidity, consumers should purchase only products sold as lime or limestone. Products that contain calcium, such as gypsum, do not correct soil acidity. Visit any Cooperative Extension office to obtain free soil testing boxes. Between November and March sample analysis at the NC Dept. of Agriculture and Consumer Services soil lab is \$4 per sample. Samples and fees may be turned in to the Anson Extension office. For further questions about fee or how to sample yards, agricultural

Knitting Group Now Gathers at Marshville Museum Twice Monthly

fields, ponds, ornamental beds, etc., contact Anson Extension at 704-694-2415.

The Marshville Museum and Cultural Center hosts a knitting group that meets the first and third Tuesdays of the month, from 2 to 4 p.m.

Margaret Pigg said, "Our little knitting group has been very busy turning out Prayer shawls, as well as red, white and blue lap robes to be given to veterans at Hospice. A couple of the ladies are taking on another project - scarves to be sent to the soldiers stationed in cold locations. We were already knitting caps for the newborn babies at CMC Union and dish cloths to sell at the Museum, and then we added prayer shawls when we merged with the Marshville Methodist Church group."

Pigg continued, "Of course, not everyone is involved in these projects. Some of us are working on personal projects. Some ladies come as beginners to learn and some come to get help with problems. I've been teaching knitting for more than 45 years, so I can probably help with problems." The gathering is not limited to knitters. Crocheters and other hand workers are

welcome, too. For more information contact Margaret Pigg at 704-624-2602. The Marshville Museum is located at 201 North Elm Street. It is open for visits Fridays and Saturdays 10 to 4 p.m. and Sundays 1 to 4 p.m. and other times by appointments and at special events. They are closed on all national holidays.

Scheduled events are sent by email and also available on Facebook or the website

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Church News

JANUARY 26 Building Fund Program at Madison Grove Church. 11am with Pastor Fred Leak & 2:30pm with Pastor James Moore from Streater Grove Church

Henderson Grove MBC, 2:30pm with Pastor Charles Sturdivant.

Dinner served. Everyone

At Garris Grove MBC, Hwy 109 North, 3pm with Rev Margo Gaddy Pastor of Savannah AME

Ministry first program of the year, 2:30pm at New Grove MBC with Pastor Billy Casey of New Zion MBC **FEBRUARY 8**

Program at House of Faith, 3pm. Theme is Walking in the New. All are invited **FEBRUARY 9**

Grove Church, 11am with Pastor Fred Leak & 2:30pm with Min Gaddy from New Beginning Church February Birthday

Chapel Holiness Church, 3:30pm with Apostle Annette Hall Ross. Everyone is invited Women in Red

MBC, 2:30pm with Pas-

Women of Fire

Chapel Holiness Church Overseer tor Phyllis Gill, all at 7:30pm. Everyone is invited

Taking It Back

Crusade Grand Finale else at Johnson Chapel Holiness Church, 2;30pm with Min Brenda Pratt, Min Christine Hall & other special guests. All are invited

Black History

Faith, 3pm. All are invited **FEBRUARY 18**

Annual Men's Day

Anson Radiator Wadesboro 704-289-7999 Autos • Freight Trucks

is invited Missionary Program

Laymen Teaching

Family & Friends

Program At Johnson

FEBRUARY 15

FEBRUARY 16

School of Biblical

reach Center begins sec-Courts of Heaven along **Prayer Line**

Pastor's Aid

Love Day Service House Faith. 10:30am

Program at Madison

Program at New Grove

tor Martin from New Life Ministry and Faith Center. All ladies please come out in your best red dress **FEBRUARY 12 - 14**

Revival at Johnson

with theme "Stepping Up Our A Game." Wed-Pas-McLendon, Thu-Pastor Joletha Dockery, Fri-Pas-

Study at Evangelist Out-

ond semester, 6:30pm. Studying Partitioning, the with other classes that are Tuesdays, 6:30-8pm at Ex-Paulette Cash 704-851- 695-1842

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FEBRUARY 29 Gospel Singing Program at New Grove

MBC, 5pm. All choirs are invited along with everyone Mass Schedule **ONGOING**

Church Service Pee Dee Cowboy Church

meets every Monday at 6:30pm for refreshments & service. A Southern Baptist outreach church serving the **Program** at House of community by giving to missionaries & others. Covered & heated facility. Info Rev Robert Wells, 704-272-

> Men's Prayer Breakfast Every second Saturday at 9am at Garris Grove MBC

photography

JANUARY 25

0955

available. Info Pastor pected End Ministries, 704-

GED Program At New Parkers Grove MBC

7pm, 704-994-9182 All welcome to services at Sacred Heart Catholic Mission in Wadesboro. Masses

every Sun-8:30am, Thur-

Tuesdays and Thursdays, 5-

6pm & Sat-9am **Tutoring Program**

After school, 2:30-6pm by Project Success at Henderson Grove Church in Lilesville. For Kindergarten through 6th grade. Info 704-475-1776

Noon Day Prayer Every Wednesday at New Life Ministries Pentecostal. Or call in request 704-270-4021 or 704-690 Bible Study

At Evangelistic Outreach Center, first and third Sundays, 4:30pm

Events **NOW - FEBRUARY 29**

Photography

Exhibit By professional photog-

Free Groceries for

Burnsville Recreation & Learning Center. 12 noon-2pm. Call 704-

826-8737 for eligibility info & details **JANUARY 27 Board of Education** Board Workshop **& Regular Meeting** in

Administrative Office Board Meeting Rm, 320 nie Camden Rd in Wades-2:30pm. Regular meeting begins with Closed Session at 4:30pm, followed by Open Sessionat Exercise every Tuesday at about 5:30pm Free Movie

Hampton B. Allen Li-694-5177

JANUARY 29 Early Release At Anson schools for professional development for teachers & staff. Ele-

mentary schools release at 12:30 p.m. Middle & high schools release at 1:30pm

JANUARY 30 **Photography** Program

Hampton B. Allen Library. brary, 10am. Everyone is in-All are invited to enjoy the vited. Info 704-694-5177 landscape, wildlife & lifestyle FEBRUARY 11 AWL Soup

Luncheon, 11am-1:30pm

rapher Austin Kiker at the the Hampton B. Allen Li-

at First Baptist Church, Lee Families in Need at Ave in Wadesboro. Delicous vegetable beef soup with toasted cheese sandwich, dessert & beverage for only \$8. All proceeds support Anson Women's League charitable efforts in the community. Eat in or take out. Deliveries for 10 or more, email Ross Huntley RHuntley@co.anson.nc.us or Bon-Morgan bonnie.morgan@windboro. Workshop at stream.net 12 noon on Feb 9. Info 704-695-5373

Chair (Seated)

ONGOING EVENTS

Thursday at 11:15am at Grace Senior Sunrise in Heaven at the Center. Info & register 704-694-6616 brary, 10am. Info 704- Cognitive Disability Caregiver Support Group,

second Tuesdays at First Presbyterian Church, Wadesboro. 7-8:30pm, Nancy

Capel 704-694-3156, Cynthia Furr 704-695-3233 **Al-Anon Family Groups** Support for Family &

Friends, Al-Anon Family Groups meets Thursdays, 8pm at AA Building, 2177 Country Club Rd in Wadesboro, between Wadesboro Health and Rehabilitation & rapher Austin Kiker at Twin Valley Golf Club

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