

Science for You

BY BOB BROWN



5-16

PROBLEM: Air pressure and weight.

NEEDED: A stick with holes, a balloon, string, a paper cup, salt and a pin.

DO THIS: Tie a string near the middle of the stick to make a handle. Tie the cup to one end of the stick, and a large balloon on the other. Add salt to the cup until the cup and balloon are balanced.

Let motion of the apparatus stop, then break the balloon by sticking the pin in the bottom of it. The cup with salt is now heavier. (If pieces of the balloon fall to the floor, put them back on the string so the loss of weight cannot be attributed to loss of rubber.)

HERE'S WHY: This experiment does not "prove that air has weight, of course, but the air outside of it has weight too, and tends to buoy it up. If the pressure inside the balloon could be exactly that of the air outside of it, there would be no difference after the balloon is punctured. What this does prove is that the "compressed" air inside the inflated balloon is heavier than the air outside the balloon, which has less pressure.

This special "Science For You" feature is sponsored by Olin Corporation at Pisgah Forest in co-operation with The Transylvania Times.

Transylvania County ASCS News

North Carolina farmers helped earn national recognition in President Nixon's recent White House Salute to Agriculture, according to H. O. Carter, State Executive Director for the Agricultural Stabilization and Conservation Service.

The President, in a unique tribute to agricultural achievement, said, "Thanks to American Agriculture for making us the best fed, the best clothed people in America; thanks to American Agriculture for providing the basic industry that is essential for any nation to be strong."

He cited specifically a 300 per cent per man-hour productivity increase for Agriculture in the last 20 years, comparing it with the 150 per cent increase recorded by other American industry.

Mr. Carter said, "We should recognize that this national salute to Agriculture is a salute to North Carolina farmers as well as those in the other 49 states.

"In our farm program agency, the Agricultural Stabilization and Conservation Service, here in North Carolina is, of course, most interested in the crops under the set-aside farm programs, corn, grain sorghum, wheat, and cotton; those under marketing quota programs, tobacco and peanuts; plus crops which are eligible for the loan, principally soybeans, barley, oats, and rye.

"Some 93,461 farms in North Carolina are participating this year in the new market-oriented set-aside farm programs. Some of the restraints on production and kinds of crops which were imposed in previous years have been removed, as was noted by President Nixon recently in a national speech on Agriculture," Mr. Carter said.

"The President told the Nation that American farmers have proven their ability to

When you think of prescriptions, think of VARNER'S, adv.

capitalize on new opportunities and can compete successfully whenever they have the chance to compete. Mr. Nixon said he is determined to see that Agriculture has that chance," he said.

President Nixon told the Salute to Agriculture audience: "It is a rule in a free society that whoever produces more should be compensated for more. The income per capita of those who live on America's farms has gone up in the last 20 years. But in terms of sharing in this increased productivity, those who live on America's farms, those who produce from America's farms, have not had the rewards from increasing productivity that their colleagues who work in American industry have had for their increase in productivity.

"It is that problem that we have been addressing ourselves to. It is that problem in which, of course, we need cooperation among all branches of Government, the Administration, the Congress, and the farm community, to see that America's farmers receive their fair share of a dramatically increasing productivity."

The focus on farming which was initiated May 2 with comments on Agriculture by the President, broadcast nationwide, culminated in daylong activities of the White House Salute to Agriculture on Friday, May 7. A representative group of farm leaders heard addresses by the President, Secretary of Agriculture Clifford M. Hardin, Attorney General John N. Mitchell, Secretary of Housing and Urban Development George W. Romney, and other Government leaders.

Following these addresses and conferences with officials, the group was entertained at a dinner at the White House with President and Mrs. Nixon. Throughout the day, an exhibit on the White House lawn included modern farm machinery and equipment, plus purebred livestock.

Hints From The County Extension Chairman

By - JERRY PURSER

Proper Time To Root Cuttings

Cuttings that should be rooted in the early summer include: Athea, Boxwood, Buddleia (Butterfly Bush), Clematis, Crape Myrtle, Flowering almond and Flowering quince

Those cuttings that should be rooted in late summer or early fall are as follows: Arborvitae, Azalea, Boxwood, Camellia, Forsythia, Gardenia, Juniper, Mountain Laurel, Pyracantha, Rose, Spirea, and Weigelia

Dogwoods can be rooted when they are in full bloom.

The best time to root Rhododendron and Mountain Laurel is from October through February.

Control Of Wild Chrysanthemum

Many home owners have asked about the control of Mugwort (Wild Chrysanthemum) in lawns and gardens. According to Extension Agronomy Specialists at North Carolina State University is to spray 2-4D three or four times a year. You may need to continue this for two or three years. It is one of the hardest weeds we have to control.

As far as vegetable gardens, there isn't any chemical that could be used unless they treat with Vorlex as a drench under plastic, and that is not a guaranteed control.

Note To Sheep Producers The Wool Pool for all sheep producers in Western North

Carolina will be held June 24 in Asheville.

Major Corn Diseases

Each year corn production potential in North Carolina is reduced due to the effects of disease. There are a number of diseases that attack corn, and in some individual fields losses are often as high as 10 per cent.

Diseases lower the value and quality of the grain and may increase harvesting costs when affected plants lodge. All parts of the plant may be attacked—the ears, leaves, stalks and roots—at various stages of development.

Corn leaf, ear and stalk diseases generally are favored by warm, wet weather. Seedling diseases are favored by cool, wet weather following planting. Pythium root rot is usually more severe in wet than in dry soil. Symptoms of nematode damage are more pronounced in dry, sandy soils.

There are no completely effective measures for controlling corn diseases; however, losses can be minimized by following certain recommended practices. The grower should become acquainted with disease problems and factors affecting their severity.

Beginning next week, we will list some of the major corn diseases in Transylvania County and list recommended method of corn control for each disease.

From The Broadcaster

New Constitution Adopted At BHS

Will Organize German Club In Transylvania

The German born citizens of Transylvania County have decided to form a club. They feel it would be a good thing for Brevard and its neighborhood to have such a club.

The aim of this club would not only be an answer to a need of these former Germans to meet with each other, but also to give an opportunity to any resident of Brevard to learn more about the cultural life as well as the customs of Germany.

A language study could be added. This might inspire other language groups to join together, either individually or unitedly with each other.

This club would certainly give Brevard an international flavor, and also it would have the benefit of uniting all the newly adopted citizens of the United States of America. It certainly would be one step closer to peace, the promoters say.

Anyone interested in this new enterprise, please contact Mrs. R. S. Berk, 335 N. Caldwell street, phone 883-3751.

When in need of job printing, call The Transylvania Times.

A new Constitution for the BHS student body was recently presented.

The purpose of the new Constitution is "to encourage the improvement of human relation and accordingly consider the dignity and value of the individual students within the school."

Article IV states the proceedings for the election of student body officers and the requirements for holding office. They are as follows:

- 1. The President will be a rising senior. He will not serve as a class or club president during his tenure of office.
2. The Vice - President will be a rising junior.
3. The Secretary will be any bonafide member of the student body the year of election other than a senior.

Two weeks after student body officers are elected, nominations will be held for class officers. The names of all the candidates will be posted in homerooms for two days. After this each class will elect their officers. The elected officers may not run for office in the same grade but will be able to run in the next higher grade.

FOR SALE—1 ream Olin Waylite Paper (500 Sheets) ideal for second copies and Air Mail Letters. Special: \$1.00. The Transylvania Times.

Ca(NO3)2 is much more than a great fertilizer*

*Tests in Florida point to low soil calcium ratio as a fundamental cause of tomato blossom-end rot

Experiments and soil analyses indicate that blossom-end rot can (most often) be expected to occur where soils have calcium ratios lower than 10 per cent.

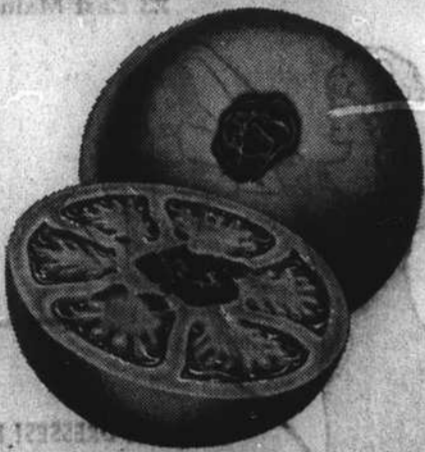
Many factors contribute to mechanisms that lower calcium ratios and may cause blossom-end rot of tomato, a widespread and growing problem: excesses of total salt and specific nutrients, unfavorable moisture relationships, low pH, and rapid growth.

In a Univ. of Florida Gulf Coast Experiment Station study these many factors were discussed. It noted that their work and reports of other investigators indicated that deficiency of calcium is a fundamental cause of blossom-end rot. All of the factors frequently associated with... severity of (the problem)... can be grouped into two major categories, according to the mechanism by which they adversely affect calcium uptake...

These were cited as, "Mechanism A.—An excess of soluble ammoniums, magnesium, potassium or sodium salts or a deficiency of soluble calcium salts (low calcium ratio) caused a decreased calcium uptake... Mechanism B.—Excessive total salts also can cause a calcium deficiency and frequently have been associated with blossom-end rot, even when the measurable calcium ratio is considered high or adequate. As salt concentrations increase, the solubility and activity (effective concentrations) of the calcium salts decrease at a more rapid rate than other soluble salts..."

A number of materials that can effectively raise the calcium ratio were described. Calcium Nitrate was reported as an excellent source of soluble calcium.

A complete copy of the Florida study, which also outlines preplant and supplementary foliar spray recommendations, is available by writing Wilson & Geo. Meyer & Co.



Blossom-end rot first becomes apparent as a water-soaked area on the blossom end of the fruit. Tissue breakdown usually develops rapidly, eventually resulting in blackened, dry, sunken, leathery spots.

Repeated ammoniac applications can set the stage for problems.

When calcium is low or depleted, soil particles tend to pack together leaving little space for air or moisture. Repeated application of ammoniac materials intensifies this condition, encouraging light soil that blocks efficient nutrition and leaching of harmful salts.



Adequate calcium, however, keeps soil particles loose, neutralizes low pH. Roots can breathe again and nutrients do their job for timely, healthier crop results.

Distributed by: Wilson & Geo. Meyer & Co. 270 Lawrence Avenue, So. San Francisco, California 94080 (415) 549-8830

Thus, Ca(NO3)2 not only works to correct many deficiency caused plant disorders, it continues to add long term soil condition benefits. Viking Ship Calcium Nitrate supplies 380 lbs. per ton of water-soluble calcium (19% by weight), and 14 1/2% nitrate nitrogen, 15 1/2% total N.

Nitrate Nitrogen doesn't wait to go to work.

Calcium Nitrate starts where organic and ammoniac fertilizers eventually end up—nitrate nitrogen. This is the form most readily absorbed by plants. It is immediately available to plant roots without conversion delay or volatilization loss.



Ca(NO3)2 is not trapped in upper soil layers, but moves quickly to the effective root zone even at low soil temperatures.

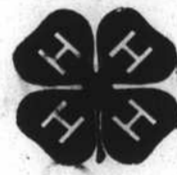
Note: The super solubility (hygroscopic quality) of Ca(NO3)2 is what makes this premium fertilizer so fast-acting and effective. Even a light dew will dissolve Calcium Nitrate. Undue exposure of open bags or hoppers during application should be avoided. As with all agricultural chemicals, consult your advisory service for the application practice best suited to local crop and soil conditions.

1967 Edition, C. M. 1957, Cause and Control of Blossom-End Rot of Tomatoes, Fla. Agr. Exp. Sta. circular S-101

Viking Ship Calcium Nitrate is produced by Norsk Hydro, Oslo, Norway



Transylvania County's 4-H Club Officers



Transylvania County's 4-H Clubs

Are Sponsoring A Movie

"The War Wagon"

Starring John Wayne And Kirk Douglas

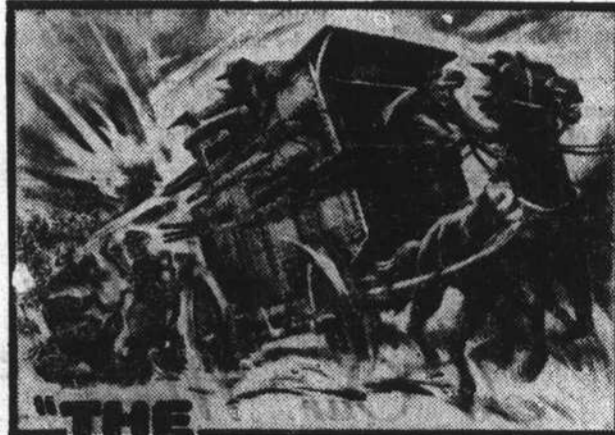
MAY 19-22

At The

CO-ED THEATER

In Brevard

Buy a ticket from the 4-H members so they can achieve their goal of a 4-H Youth Activity Bus for the youth of Transylvania County. Tickets are available from the 4-H members.



"THE WAR WAGON" ROLLS AND THE SCREEN EXPLODES!

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