



THE NOVUS NEWSLETTER
OF THE
THE TIDEWATER ROSE SOCIETY
APRIL 2010



WHAT IS WRONG WITH MY ROSES: IDENTIFYING ROSE DISEASES

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The third meeting of the Tidewater Rose Society's Seventy-fifth year will be held at the Norfolk Botanical Garden, Sunday at 2:30 p.m., April 18, 2010, in the Holly Room of Baker Hall. Liz Mangino will have an ARS power point presentation on: "WHAT IS WRONG WITH MY ROSES: IDENTIFYING ROSE DISEASES". There will also be a panel of TRS Consulting Rosarians to answer questions concerning how to control diseases.

COUNTRY STORE NEWS: We will have Mills Magic, Easy Feed, Fish Emulsion, Gloves & Felco Pruners.

See you at the meeting,

George

From the President's Desk

As the roses are starting to leaf out the rose grower must decide what course of disease protection is required for the rose garden. Whether you use synthetic products or organic products, prevention is the key to help control disease. But when a disease does develop, identification is the key to success in taking the right action and this is where Liz's program, "What is Wrong with My Roses: Identifying Rose Diseases", is a timely presentation.

The White Elephant Sale will be held at the April meeting to help raise money for the Fall District Meeting/Rose Show. Donations will be appreciated and of course all purchases of donated items will help to sponsor the fall meeting and rose show.

I would like to introduce our new members: Tim and Betty Wyatt Coyle.

See you at the next meeting and bring a friend.

Mike

Characteristics of Soil

Let Nature Do It

By Randy Scott, Consulting Rosarian
Woodbridge, Va.

Soil is made up of varying ratios of minerals, air, water and organic material. Soil is healthy if it consists of roughly 40% mineral, 23% water, 23% air, 6% organic material and 8% living organisms.

Soil texture is concerned with the relative proportions of mineral particles of various sizes in a given soil. These particles are grouped into 3 basic categories: sand, silt and clay. Sand particles are the largest ones in soil other than gravel or other rocks. Intermediate sized particles are called silt. The very smallest particles in soil are clay.

Heavy and light are commonly used to describe soils. They refer to the ease of tillage, and not to soil weight. Heavy soils are commonly finer soils, which require more horsepower because the higher clay content makes them stickier. Light soils have a higher percentage of sand (thus coarse textures), stick together less, and require less "muscle" to till.

The rate of water percolation is another way to describe the texture of soils. Soils percolate water at different rates. Soil should be watered only as much and as fast as the soil can absorb without runoff. Sandy soil absorbs more than two inches of water per hour. It is very porous. Loam soils absorb from 0.25 to 2 inches per hour. The soil is loose and porous but holds water quite well. Clay soil absorbs less than 0.25 inches of water per hour. Clay soil is dense with few air spaces between particles and holds water so tightly that little water is available to the plants. This very dense soil also prevents oxygen from reaching plant roots.

As if it's not enough to worry about the structure of a soil and its fertility, there are other factors that have an influence on both of these qualities and upon the type of organisms that develop in the soil. The two other factors are acidity and alkalinity, measured by pH readings, which are also necessary to consider. The breakdown, intake and utilization of minerals in plants are essentially chemical and biological reactions. Most reactions in living systems take place at a specific pH. Roses and many other plants do well when the pH is between 6.4 and 7, just a shade on the acid side. Most eastern soils are usually acidic. In many Virginia locations the pH is as low as 5.0. Although in some mountain regions there are pockets of soil that have a limestone base and can have a pH that is slightly basic. So to achieve an optimum range regular adjustment is required. A soil analysis is good to have every several years to help guide your fertilization schedule. This will also include a pH test and an organic content measurement. Lime is often added to clay soil to counter its natural acidity. As a general rule apply 5 pounds of limestone per 100 square feet. Dolomitic lime is also a favorite because it also contains magnesium. To determine the effect of the application it is wise to have a pH meter of your own to monitor the pH of your garden. Regions with high pH will need to lower it. Sulfur compounds are generally used to achieve this at a rate of 1.6 pounds per 100 square feet.

What is the best way improve the soil in your garden? The most important thing we can do to improve the soil is to begin restoring the organic content. Most of us do not have the benefit of living on land that has remained at its natural level. In developed areas all the topsoil has been removed during the home building process leaving little more than a compact, sterile subsoil with no organic content in which to grow our roses. An organic content of 5% is considered a minimum acceptable organic content in soils. It is the organic material in the soil that provides a repository for nutrients as well as a home to many beneficial organisms that help to decompose dead organic matter, make nutrients available to plants, provide aeration, regulate moisture retention, soil temperature, and provide a system of checks and balances between the harmful and beneficial components of the soil. Most soils contain less than the minimum 5% organic matter. Since it is a proven fact that insects, weeds and diseases are much less of a problem in healthy soil, it should be obvious that amending the soil with good, organic material is a necessity.

Since soil conditioning materials and organic fertilizers are slow working in general, they should be mixed into the soil at least a month ahead of planting or transplanting. To help existing plants, organic materials may be worked into the soil between plants at any time or added as a side dressing. As the amendments decompose their benefits will be realized. You can repeat this as decomposition occurs.

What are some of the best organic soil condition materials? Start by establishing a compost pile. Most anything organic can be added: grass cuttings, leaves, straw, pine needles, shrub clippings and coffee grounds. Save your kitchen disposal by saving your kitchen scraps for the compost pile, but avoid any animal scraps or grease and oils that can attract pest. Almost any plant material is suitable. This provides a simple system for you to have a great garden. One of the top rose exhibitors in the country went to this system years ago. His garden consistently produces prize-winning roses using only compost and basic 5-10-5 or 10-10-10 fertilizers. Where animal manures is available, they are probably the best source of fertilizer and organic matter for the rose garden. Use manures that have been composted so any weed material will not germinate. Manures vary greatly in their content of nutrients. Their composition varies according to type, age, and condition of the animal, kind of feed used, degree of decomposition, moisture content and the amount of bedding litter. They may be as high as 4.35% N, 2% P and 2% K in some cases. Some of the best features of animal manures are that they provide most of the micronutrients needed and help to establish biological activity from the microorganisms in the manure. Processed poultry manure is not likely to provide these microorganisms, but any composted manures such as horse, cow, sheep and poultry will.

Some non-composted amendments may not immediately affect any biological processes, but may be a great amendment to change the physical character of your soil. Agricultural "Perlite", peat moss, and super fine hardwood mulch work wonders to break up clay soil. Adding sand to clay soils is generally thought to be a questionable practice. Sand combined with many of the minerals in the clay is likely to make it more like cement. Improve your roses by starting at the soil level. Give nature a little help through the use of manures and composting amendments.

Tidewater Rose Society Meeting Dates for 2010:

April 18
May 16
June 13 (picnic)
August 15
September 19
October 17
November 21

Rose Show Dates
May 15, Virginia Peninsula Rose Society
May 29, Richmond Rose Society
June 5, Arlington Rose Society
June 6, Maryland Rose Society
June 7, Charleston (W.V.) Rose Society

Consulting Rosarians	
George Wilson, Chairman	
Cathy Daley	757-440-3417
Lynn Hunt	410-221-0283
Howard E. Jones	757-481-4158
Glenn Millard	757-488-2171
Marian Millard	757-488-2171
Michael Price	757-583-6770
George Wilson	757-853-0621
Patricia Wilson	757-853-0621

POWDERY MILDEW & BLACKSPOT

A Quick Review

Monica Valentovic and Gary Rankin

About this time each year we begin to think about preventing fungal infections on the roses. It is important that you already have started your spray program. If you have not yet begun to spray, then start today. The main reason that we use fungicides is that fungal infections can be quite disfiguring to rose bushes and lead to serious loss of vigor and decreased flower production. For the home gardener, fungal infections on roses can occur because of a lack of preventative care (either too infrequent application of fungicides or no applications), the use of outdated products, or the emergence of resistant strains of fungus.

The main fungal infections that rosarians encounter in our area are powdery mildew and blackspot. Another fungal infection, anthracnose, is seen less often by rosarians in our area, but can appear and is controlled by the agents that control blackspot. However, conditions that favor fog formation also favor the appearance of anthracnose. May is usually the time of year when powdery mildew first appears in our area of West Virginia with blackspot appearing later in the spring or early summer.

POWDERY MILDEW

Powdery mildew is a fungal infection that appears mainly on new growth. It appears as a fuzzy white powder covering tender new shoots and leaves. Once you can see the presence of powdery mildew, it has already invaded the plant's tissues. If left untreated, powdery mildew can kill the cells of the plant leaves and cause the leaves to curl or ripple.

Powdery mildew begins to show up in the garden when days are warm (50-80 degrees F) and nights are cool with elevated humidity. Cool foggy or dew laden nights with warm days can be ideal for powdery mildew to take off. The fungal spores are everywhere and easily attach themselves to new moist rose leaves. However, the spores grow when the leaf surface dries out during the day.

The best control for powdery mildew is prevention. Make sure plants are spaced far enough apart to allow for adequate airflow to help prevent mildew formation. Spores can also be washed from the plants before they imbed in tissue by using a strong stream of water early in the day. Fungicides (e.g. Immunox, Banner Maxx) used regularly (every 7 to 14 days) can also be used to prevent mildew infestation and help prevent the spread of powdery mildew once an outbreak has occurred. Other treatments include baking soda (1-3 teaspoons/gallon) alone or in combination with insecticidal soap or Sunspray ultrafine oil (2 tablespoons/gallon). Baking soda makes the leaf surface more alkaline and discourages spore growth. A study by one of the extension agencies in the United States noted better success if an oil or spreader sticker was included with the baking soda solution, presumably due to better dispersal along the leaf. These treatments produced some success when sprayed weekly and can offer an alternative to the use of traditional fungicidal chemicals.

Blackspot

Like powdery mildew, blackspot is a common fungal infection in roses. The blackspot spores are mainly found in the ground and get onto the lower leaves when the rose bush is watered or when rainwater splashes the spores onto the plant. Thus, unlike powdery mildew that starts at or near the top of the rose bush, blackspot usually begins on the lower portions of the bush. Blackspot infections look just like the name suggests – black fuzzy-edged spots on green leaves that eventually turn yellow (due to ethylene production by the fungus) and fall off. If left unchecked, roses may lose most of their leaves and be more susceptible to winter damage and killing. Conditions that promote blackspot disease are warm temperature (70-80 degrees F) and moist conditions (e.g. rain followed by high humidity). Blackspot spores need at least seven to nine hours of warm, moist conditions for the spores to germinate.

Prevention is again the best way to keep blackspot infections away from roses. Make sure that your bushes are planted far enough apart and away from structures to allow for adequate airflow. Don't splash water on the leaves when watering. Water during the day so that leaves can dry before evening is also better than watering early in the evening. Remove all blackspot leaves from the ground each fall and start a preventative spray program early in the spring. If blackspot appears, remove the blackspot leaves from the rose bush and from the ground. Spraying with fungicides such as Daconil, Manzate, Banner Maxx or Compass is necessary for controlling an outbreak of blackspot. Rotation of two or more fungicides also helps to keep resistant strains of blackspot from getting established in the garden.

(Editor's note: Even though Monica and Gary live in West Virginia, the same weather conditions are prevalent here in the Tidewater Area.)

POETRY & PROSE
Selected by Pat Wilson

THORNS

I was a child. I remember
gathering wild roses.
They had so many thorns---
I didn't want to break them---
I believed they were buds
and were going to flower.

Then I met you. O love,
You had so many thorns!
I didn't want to strip them---
I believed they would flower.

All this I review today,
and smile---smile
and wander the roads
driven by the wind.
I was a child.

Lucian Blaga

2010 TRS APPOINTMENTS & RESPONSIBILITIES

Program Chairman.....	Elizabeth Mangino (1st VP)
Membership Chairman.....	Donald Snipes (2 nd VP)
Rose Show Co-Chairman.....	Peggy Scott/Eveline Price
Newsletter Editor.....	Michael Price
Hospitality Chairman	Cathy Daley
June Picnic Chairman.....	Sarah Jones
January Banquet Chairman.....	Nancy Sutcliffe
Country Store	George Wilson
Consulting Rosarian Chairman.....	George Wilson
Property Manager.....	George Wilson
Parliamentarian.....	Patricia Wilson

VIRGINIA BEACH MASTER GARDENERS' PLANT SALE

9:00 A.M. – 3:00 P.M.
SATURDAY, MAY 8, 2010
(RAIN OR SHINE)

Many unusual or hard to find varieties of: Annuals, Perennials, Herbs, Shrubs, Aquatics & Vegetables

Also Featuring:
Cut flowers and arrangements grown & arranged by Virginia Beach Master Gardeners

Virginia Beach Farmer's Market
3640 Dam Neck Road, Virginia Beach
(Corner of Princess Anne Rd. & Dam Neck Rd.)
For more information visit: www.vbmg.org
or call (757) 385-4769

TIDBITS:

1. I would like to thank the members that brought refreshments to the March meeting.
2. **You may notice that there are two articles concerning powdery mildew and blackspot.** One article discusses the traditional approach and the second the organic alternative.
3. The May meeting will be the member Novice Rose Show. Members that have not won a blue ribbon in a sanctioned ARS Rose Show are eligible. There will be three classes: Hybrid Teas or Floribundas, Mini or Mini-floras and Design. Cut your hybrid teas/floribundas 17-22" long, minis/minifloras cut 8-12" long, leaving the foliage, blooms should be 1/2 to 3/4 opened, no stamens showing. There will be members available to help you prepare you entries. The design class will be for minis or minifloras. The TRS Novice Trophy will be awarded for the best Hybrid Tea or Floribunda or Mini or Miniflora. After the announcement of the winner, a critique will be given concerning exhibiting. **Don't be shy!** Exhibiting roses is really a lot of fun. More information will be given in the May newsletter.
4. June will be our picnic. If you can, plan on coming. The food is great and so is the company.

MEMBERSHIP

Welcome to new members:

Tim and Betty Wyatt Coyle
1333 W. Princess Anne Rd.
Norfolk, Va. 23507
Phone: 757-625-3182
E-mail: nohits@verizon.net

Please direct all applications and other correspondence regarding membership to the Membership Chairman:

Mr. Donald R. Snipes
1300 DeBree Ave.
Norfolk, Va. 23517-2127
757-625-7143
E-mail: drsnpes@cox.net

days and **Dr. Horst found the mixture was most effective in preventing blackspot**, but was also effective on powdery mildew.

Other research at Cornell focused on controlling fungal diseases, including powdery mildew, on members of the gourd family (i.e. cucumbers and pumpkins). Researchers discovered that a single spray of baking soda and SunSpray brand horticultural oil almost completely inhibited powdery mildew on heavily infected pumpkin foliage. Baking soda without any oil was completely ineffective.

The above baking soda formula is based on the Cornell research. According to Dr. Horst, his formula is now available commercially under the name of Remedy. Remedy by Bonide available online at [Gardener's Supply](#) and fine garden centers or contact [Bonide](#), 800-424-9300

Solution #2 - The Baking Soda-Vinegar Formula

1½ tablespoons	baking soda
2 tablespoons	vegetable oil
1½ tablespoons	Safer Insecticidal Soap (or liquid, not dish, soap)
1 gallon	water
1 tablespoon	vinegar

Mix together the baking soda, oil, soap, and water. STIR in the vinegar last - don't shake! Pour into a no-clog type hose-end sprayer. If you only have a couple of roses to treat use a hand-held spray bottle. Spray in the morning and when the temperature is less than 80 degrees. Thoroughly soak all parts of the plant. Apply weekly as needed.

If you remember your high school chemistry, when you mix an acid (vinegar) and a base (baking soda) they cancel each other out and you get water that has a neutral pH. So the question is, how does this formula work to kill mildew?

When baking soda and vinegar are mixed they produce water, carbon dioxide (which bubbles away), and sodium acetate (which stays in solution). I found many references to sodium diacetate as a mold and mildew inhibitor in baked goods and some references to sodium acetate as a fungicide. Apparently, the active ingredient of the baking soda-vinegar solution is the sodium acetate.

Solution #3 - The Vinegar Rinse

2 tablespoons	white or cider vinegar (5 percent)
1 gallon	water

Pour undiluted vinegar into the container of a dial-a-spray hose-end sprayer. Set the dial to deliver 2 tablespoons per gallon and start spraying. Soak the entire plant, making sure to get the undersides of the leaves. Spray only in the morning. Apply once a week as needed until the weather warms up.

Photos:

by J.K. Clark

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(The above article is from “Good Earth R.O.S.E. Care”)

ROSEMANIA SUGGESTED SPRAY PROGRAMS



As soon as you receive your pesticide, write the date on the label. If properly stored in a climate-controlled area, the product should be good for 3 to 5 years (depending on the product) once opened.

Remember to always wear protective clothing and a pesticide respirator when spraying any pesticide.

Recommended Spray Programs

Fungicides: With any good spray program, the key is "Prevention". You don't want to be spending all your time fighting blackspot and powdery mildew. You want to prevent it from happening in the first place. When you prune in the spring, you should immediately start your spray program. We recommend you spray the canes and the bed with a blackspot contact-killer such as ***Mancozeb*** or ***Pentathlon DF***. This will eliminate any blackspot spores that may have wintered over. One week later, start your preventative program and continue until your roses go dormant from cold weather. Rosarians in warmer climates like Florida and California may need to continue their spray program year round.

Our Best Program: If you have a large garden (100+ bushes) or if money is no object when it comes to protecting your prized roses, we recommend alternating ***Banner Maxx*** (or ***Honor Guard***) with ***Compass*** every two weeks.

Economical Program: Spray ***Banner Maxx*** (or ***Honor Guard***) every two weeks. Add ***Pentathlon DF*** or ***Mancozeb*** to the ***Banner Maxx*** every other spraying. The ***Pentathlon DF*** or ***Mancozeb*** will kill any blackspot spores that are building up a resistance to the ***Banner Maxx***. Anytime you combine products, always use them at full strength. If blackspot is already active in your garden, spraying a preventative alone is not going to be enough. You need a blackspot contact killer. Spray ***Pentathlon DF*** or ***Mancozeb*** every three days for three intervals. Example: Spray on Monday, Thursday and Sunday. Spray the top and bottom side of the leaves and the bed. This will kill all the active spores and give you a fresh start. Once completed, go back to your regular preventative program.

If you are using products like ***cleary's*** or ***Immunox***, you will need to spray every seven days. These are excellent products but they do not give long protection like ***Banner Maxx*** (***Honor Guard***) and ***Compass***.

Insecticides & Miticides: We do not recommend spraying insecticides or miticides preventively. Spray them only when you have a pest problem. Products like ***Orthene*** work great on most common pests like aphids and thrips. However, they also kill the beneficial insects that naturally keep the spider mites under control. For best protection against aphids or Japanese beetles, we recommend ***Merit***. For best thrip control, use ***Conserve SC***.

Spray for spider mites when you first start to see evidence of them. Remember that ***Avid*** miticide only kills the adults so you will need to repeat after three or four days to kill the newly hatched mites. ***Floramite*** and ***Forbid*** will eliminate both the adult mites and the eggs so it is rare to have to repeat more often than 21 days.

We strongly recommend the use of ***Indicate 5*** with all of the products mentioned above. ***Indicate 5*** is a spreader-sticker that will enable the spray to easily coat the entire upper and lower surfaces of the leaves and help the pesticide to "stick" to the plant.

See ROSEMANIA'S complete catalog at: www.rosemania.com. Orders: Toll Free: 888-600-9665. QUESTIONS: 615-794-4416. Central Time M-F; 8:00 a.m. to 5:00 p.m.



Miniflora - Flawless

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