



The Bloomin' News

Sandhills Community College

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The Sandhills Horticultural Society - dedicated to the support of the Sandhills Horticultural Gardens since 1987. Please help the Gardens grow by becoming a Society member.

Understanding a Little about Fertilizer

Dee Johnson

When you go shopping for fertilizer it can be like going to the grocery store and trying to decide which bread is the best for your health. There are so many choices and many just look the same just different wrappers. You have to be able to read the labels to determine what is best for you and your plants.

First you have to choose between organic and inorganic fertilizers. Organic fertilizers are derived directly from animal or plant sources. Inorganic fertilizers are sometimes called synthetic fertilizers, because they go through some manufacturing process, although many of them come from naturally occurring mineral deposits. One is not better than another. It depends on what your soil needs and that really can only be determined by a soil test. Organic fertilizers tend to have lower ratios of nutrients and not be as complete in their nutrients. They tend to be slower releasing so are available for a longer period of time in the soil. Because inorganic fertilizers break down more quickly you must be careful not to over fertilize and burn your plants.

Once you decide on the type of fertilizer you need to understand what those numbers mean on the bag, 8-8-8, 5-10-10, or 24-10-8 for example. The first number indicates the percentage of nitrogen in a 100 pound bag. So if you bought a 50 pound bag of 8-8-8 you are not putting out eight pounds of nitrogen; you are only putting out four pounds of Nitrogen. Nitrogen will promote leaf growth and give you nice green leaves.

The second number in the formulation indicates the percentage of phosphorous in a 100 pound bag. With 5-10-10 there are five pounds of phosphorous in a 50 pound bag. Phosphorous is what you need for root growth and blooms. That is why many bulb plantings recommend some type of phosphorous when planting.

The third number in the formulation indicates the percentage of potassium in a 100 pound bag. With 24-

10-8 there is four pounds of potassium in a 50 pound bag. Potassium is what you want for good root development and disease resistance.

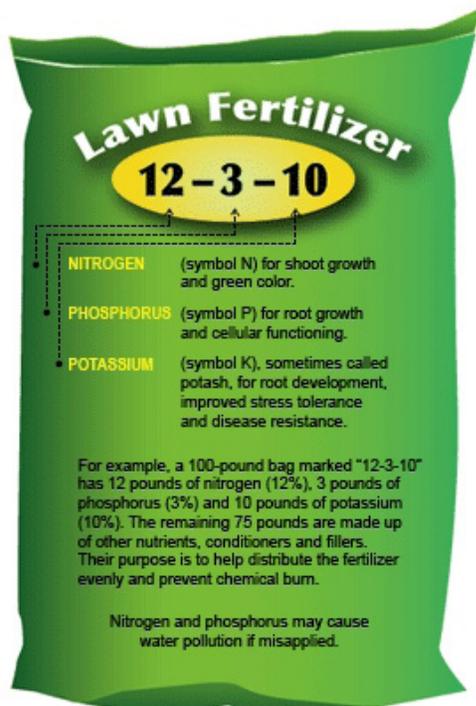
If you have so few pounds of fertilizer in your 50 pound bag of fertilizer what is in the rest of the bag? Sometimes there are micro-nutrients. Nutrients that the plant does not need in great quantities, for example sulfur, magnesium and calcium. The rest of the weight is made up of inert stuff... things to keep it dry, things to keep it loose, things to make it easy to spread with a spreader and things to make it melt into the soil. None of these things will harm the soil. That filler

just makes the fertilizer easier to use and to help it work better in the soil.

I have only been talking about granular fertilizers here, but liquid formulations are the same. The first number indicates the amount of nitrogen, second phosphorous and the third potassium. Liquid feed is going to be more readily available to the plant.

It seems that there is either an over application of fertilizer, more than the plant can use and it becomes harmful to the plant or there is not sufficient amounts of fertilizer given to the plant for optimum growth. To use fertilizers most effectively it is recommended that you obtain a soil test. Most of the year (generally April through November), routine NCDA&CS soil tests are provided at "no direct cost" to

N.C. residents because of funding derived from a statewide fee on commercial fertilizer. From December through March, however, a peak-season fee of \$4 is charged for the processing of all soil samples. You may pick up boxes to do your soil testing at your county Cooperative Extension office or at the Agronomic Division office in Raleigh. They will also have the necessary paper work that you will need to fill out on the soil you want sampled.



HAPPY GARDENING



Summer Turf Maintenance

Johanna Westmen



When most people think about maintaining their turfgrass through the summer months, they are usually thinking about mowing and watering. Yes, these are vital aspects of summer turf maintenance but it can go much further than that.

Watering can be the number one concern for most people when it comes to maintaining their turfgrass in the summer, and it can also be the driest time of the year for us here in the Sandhills. Also, attributing to the need for watering, is the fact that most of our soils in this region are comprised mainly of sand. As you may or may not realize, sandy soils drain very quickly and for this reason will require much more watering than a soil which may have clay as its primary component. The rule of thumb for all turfgrasses is that they receive at least one inch of water per week. This can be accomplished either by irrigation or if we are lucky, by rainfall. One way you can determine the amount of rainfall is to simply install a rain gauge in your garden and if you are watering with an irrigation system, you could simply run the system on your lawn and gather the amount of water that is being placed on the turf by capturing it in a can and then measure the amount. You will need to use something that is low and has straight sides, not tapered, so that you can measure it. It is also recommended that you water deeply and infrequently so you are encouraging the roots to travel down and not stay shallow near the soil's surface. This will help your turf withstand our hot and sometimes dry summers.

Another important aspect of turf maintenance is mowing. For some people, this can be a chore but for others it's a great form of exercise. There is also a general rule for mowing. It is recommended that each time you mow, you should not be removing more than 1/3 of the grass blade. Research has shown that when more than 1/3 of the grass blade is removed, the plant reacts by losing part of its roots to balance out the loss of leaf blade. Less leaf blade, less roots needed. This is why you will see many professional turfgrass growers, such as golf courses, mowing much more frequently than the average homeowner does, in order to keep within the 1/3 rule. Now, I know not everyone has the time or energy to mow their turf 3-4 times per week, so you could possibly raise your height of cut so that you are not removing more than the recommended amount. Another recommendation is to allow your clippings to return to your soil by not bagging them. This is a way to increase your soil fertility and the fertility of your turfgrass.

By the time summer rolls around, you should have already fertilized your warm season grasses at least two times utilizing the recommendation for bermudagrass and zoysiagrass of 1 lb. Nitrogen per 1000 sq. ft. starting when the turfgrass is actively growing. In the Sandhills, this can be as early as April, or as late as May. You will note that I did not include centipedegrass in

the above recommendation. That is because centipedegrass only likes to be fertilized once, in June. The recommendation for fertilizing centipedegrass is a .5 lb. of Nitrogen per 1000 sq. ft. only once a year. Centipedegrass prefers to have a lower percentage of Nitrogen in its fertilizer choice as opposed to bermudagrass and zoysiagrass which prefers a higher percentage of nitrogen.

Lastly, aerification of your warm season turfgrasses such as bermudagrass and zoysiagrass also occurs in the growing months. This is not something typically which is performed by most homeowners, as most people don't usually own aerating equipment, but it is surely something that most professional lawn maintenance companies offer as part of their services. Aerification of your warm season grasses can help reduce compaction as well as increase your root vigor due to the more favorable soil environment it creates by increasing the amount of water and air exchange. The key to aerification is to only perform this when the turfgrass is actively growing, this way the turf is capable of healing itself.

I hope I have not made the maintenance of summer turfgrasses seem like a chore. It can be very rewarding to grow and maintain turfgrass, especially when the outcome shows all your hard work.

Containers and Watering

Jim Westmen

There is nothing like a beautiful mixed container for adding color and texture to your porch or patio. After planting your containers, watering may be your number one influence on how well it really turns out. Check moisture of your containers before watering by first looking at the soil surface, but don't be fooled as the surface can look either dry or moist and sometimes can be a false indicator. Using your finger to touch and feel for moisture works well in most cases. Be careful if you use any type of pesticide in your pots, as the pesticide can transfer to your hands by doing this.

Another valuable tool for checking the moisture of your containers is a moisture meter. Moisture meters are relatively inexpensive and handy to use. I have one and use it on my interior plants to help prevent me from overwatering. Stick the probe into the soil and the needle on the meter tells you whether to water or not.

When applying water, remember this. If you water deeply, you can reduce the frequency of your watering. It also helps to wash out any salts that may be there from a fertilizer application you have applied or even fertilizer which may have been in your potting soil. The way I do this is to water the container, allow the water to absorb into the growing media and then water again to ensure a good soaking. Always look for some water to drain from the bottom so that you know you have accomplished your goal of deep watering.



Continued on Page 3

If the containers dry out completely, you may notice that the soil may have pulled away from the sides of the container. In this case, you will probably need to water two or three times in order to completely wet the soil. If you do not do this, sometimes the water will just run to the outside of the pot where the soil has pulled away and run out the bottom, not wetting the container soil at all.

Watch your plants for signs of water stress by getting to know how your different plants use water. The sun exposure they are placed in will have a big effect on their watering needs. Whether the container is in all day full sun, morning or afternoon sun, or in the shade all day will greatly affect its water needs.

The time of day that you water can also have an affect. Morning watering would be best to supply them with all the water they need for the day, although sometimes particularly during mid summer with high temperatures and when the plants have really filled out the container they may need to be watered more than once a day. Syringing the foliage can help reduce water loss for many plants. Be careful though, there are those plants which are prone to mildew diseases so by keeping water off the leaves you can keep the disease pressure down.

If you are away or want to reduce the frequency of watering your containers, there are some commercially available soil additives that can be added to the soil mix prior to planting which absorb water and release it over an extended period. Be sure to follow the recommendations on the package when adding to your soil mix. These products swell up like jello and if you put too much it will cause the soil to heave up along with the plants. I have had personal experience with this!

Lastly, don't rely on the rain to do the job completely. It is always a good idea to still check your containers moisture level after a rainfall. When plants really fill out the containers most of the rainfall will drip outside the containers rim.

I hope this bit of information will help those who enjoy the beauty of containers. Watering will give you the chance to observe and enjoy your containers closely and while there stop and appreciate your hard work. Happy watering.

Horticultural Society Events

Dolores Muller

Besides a variety of workshops, the Sandhills Horticultural Society is offering a series of free lectures called Lunch and Learn. On the last Monday of each month, except for May which is Memorial Day, from April through September we will feature a speaker from 12 noon to 1PM and they will speak on a variety of topics. Local nursery owners, plant experts and turfgrass growers will give a presentation during the lunch hour. Bring your lunch, learn and have your gardening questions answered. The Horticultural Society will provide something to drink. See the following event listings to view the speakers, dates and topics. Register by email: landscapegardening@sandhills.edu



Judy Auch and her Living Wall Picture

The last several months, we have had some very popular, fun workshops. In March we hosted a class in Growing Vegetables in Containers conducted by Jan Leitschuh. Each person planted and took home a tomato and potato plant. We had a Summer and Fall Blooming Bulb presentation by CCNC horticulturalist Hilarie Blevins and Peter Hertl of NC State University gave a

presentation on coping with Moles and Voles in the Garden which we co-sponsored with the Sandhills Council if Garden Clubs.

In April the Plant a Living Wall workshop we offered was so popular a morning and afternoon session was given. Participants created and went home with a smaller version of a planted living wall much like the ones at Belk's Department store. Also in April there were two plant sales; the Horticultural Society sale of trees, shrubs and bulbs and the Student's Annual Bedding Plant Sale of annuals, herbs and vegetables.

We have some new and exciting workshops planned in the future. I hope to see you at one of our upcoming events and at our Lunch and Learn programs.

Coming Up in June, July & August

Lunch & Learn

June 30 (Monday) FREE – 12 to 1PM – Ball Visitors Center

Pete Gulley of Gulley's Garden Center will talk about "What We Need to Do in the Garden at This Time of Year". Bring your lunch and the Garden will provide drinks.

Register by email: landscapegardening@sandhills.edu

Lunch & Learn

July 28 (Monday) FREE – 12 to 1PM – Ball Visitors Center

Adele Kushe of Big Bloomers will tell us "What's New in the Plant World – Perennials, Annuals & Shrubs". Bring your lunch and the Garden will provide drinks.

Register by email: landscapegardening@sandhills.edu

Lavender Workshop

August 6 (Wednesday) 10 to Noon – Ball Visitors Center.

Norma Burns of Bluebird Lavender Farm in Bennett NC will conduct a program on growing lavender and its uses. Participants will take home Lavender lotion. Space is limited to 30 – payment due by July 16.

Horticultural Society Members \$30, Non-members \$35.

Nature's Treasurer Trail Adventure

August 23 (Saturday) FREE - 9AM to Noon – Ball Visitors Center and the Sandhills Horticultural Gardens.

All ages are welcome but this event is geared to ages 5 to 12. Parents and grandparents will have as much fun as the little ones. Upon arrival receive a treasure map and begin your adventure visiting eight areas of discovery. Refreshments will be served.

To register contact Tricia Mabe at 910-695-3882.





Sandhills Community College
3395 Airport Road
Pinehurst, NC 28374
www.sandhills.edu

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Summer Gardening Tips

- Put up your hummingbird feeders
- Fertilize centipede lawns in June with ½ lb N/1000 sq.ft.
- When planting containers mix 3 parts potting soil mix (not top soil) and 1 part mushroom compost.
- Aerate any warm season grasses
- Harvest your summer vegetables
- Plant your Fall garden in late August
- Mulch annual and perennial beds to discourage weeds and hold in moisture.