

Horticulture 2011 Newsletter

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Video of the Week:

[Cleaning Up the Garden in the Fall](#)

UPCOMING EVENTS

Kansas Turfgrass Conference - December 6, 7 and 8, 2011
Kansas Expo Centre, Topeka

Great Plains Growers Conference - January 5, 6 & 7, 2012
St. Joseph, MO

RetailWorks - February 17, 2012
Topeka, KS

TURFGRASS

Poor Seed Germination This Fall? You're Not Alone



I've been getting several phone calls and emails, and I've visited several properties that have had poor seed germination this fall. I think it all relates to the drought we've been experiencing this fall.

This September and October are tied for the 3rd driest in Kansas City. I saw poor germination in irrigated lawns and no germination in unirrigated lawns. It was also very easy to see where the sprinkler system had uniformity and distribution problems. If the sprinkler system wasn't applying

water perfectly, then the existing grass became drought stressed and the seed did not germinate well.

I saw several instances where the trees were taking moisture from the soil and preventing seed germination and stressing out existing grass. Don't forget that 90% of the moisture and nutrient

absorbing tree roots are in the top 12 inches of the soil - - in the same area where the grass roots are. The two of them compete for water and nutrients. During normal fall weather, this competition can be overcome by rainfall and sprinklers. But even the best installed irrigation system is not 100% uniform and accurate, and those discrepancies will appear in drought years like this.

So what now? Before I give you some recommendations for moving forward, let me remind you that it is too late to seed now. Normally, I don't recommend seeding after October 15. Anytime you seed after the 15th of October it is a gamble that some or all of the seed that germinates will die over the winter. My recommendation for thin, damaged, or bare areas is to wait and do a dormant seed or a spring seed.

Dormant seeding is performed like fall seeding (ensuring seed to soil contact with verticutter or aerator) except it is done when the soils have cooled enough to prevent germination. Usually that time in Kansas is sometime after Thanksgiving. In a dormant seeding operation, the seed will lay in the yard until next spring when the soils warm back up. There are benefits and pitfalls to dormant seeding. The main benefit of dormant seeding, compared to spring seeding, is avoiding the mud. Many times in the spring the snow is melting and it is raining, making it difficult to get out and work the ground during the seeding process. But the pitfalls of dormant seeding come in the form of wind and water erosion moving the seed around. In some situations, if the seed is not incorporated into the soil well, or if the soils are sloped and not covered with erosion control/seedling blankets, the seed can be washed away or moved around on the soil. If you suspect erosion will be a problem, use erosion control blankets or something to prevent erosion, or wait until next spring.

Dormant seeding will germinate at the same time or slightly before a spring seeding will germinate. Therefore, spring seeded areas and dormant seeded areas will probably need a little extra care in monitoring the moisture and drought stress of the lawn into the spring and throughout the summer. These spring germinated seedlings might not have the fully mature and deep root systems that fall germinated seedlings would have.

Nick Christians at Iowa State University posted two articles detailing some of the research they conducted during the drought of 1988. Check them out here; [Drought of 2011 Drought Part 2](#)

So, if you had poor germination in spots all across your turf area, you are not alone. (RST)

Knotweed Control

Knotweed thrives in compacted soils, so a thorough aeration is the first step in control. This weed will not compete in a healthy lawn. Chemically, there are two options. Knotweed is an annual that germinates in late February or early March, so a preemergence herbicide can be used in the late fall



(about now). Pendimethalin (Scotts Halts), Surflan (Weed Impede), Barricade, Dimension and XL are labeled for knotweed. (Note: Pendimethalin, Barricade and Dimension can be used on all Kansas turfgrasses, while Surflan and XL can only be used on tall fescue and warm-season grasses). The other option is to use a combination postemergence product such as Trimec, Weed-Out, Weed-B-Gon or Weed Free Zone after the knotweed has germinated in the spring but is still young.

If spring seeding is planned, your options are more limited. Buctril can be used on commercial sites and has a very short residual. It must be used on very young knotweed to get control. Trimec and others require a month before seeding. Obviously, don't use a preemergence herbicide if you are trying to get new seed established. For homeowners seeding in the spring, tilling will control knotweed adequately without using a herbicide. If seeding without tilling (e.g., overseeding using a slicer-seeder), then use a combination product such as one mentioned above just after the knotweed comes up in the spring, and be sure to wait at least a month before seeding. (WU)

ORNAMENTALS

Ornamental Grasses Not Blooming?



After this hot dry summer and fall, it was interesting to walk the ornamental grass trials at the Olathe Center and see what looks good and what doesn't. Most of these grasses are in their 4th season and did not receive any supplemental water this year. They are planted in full sun and wind exposure with bark mulch around them.

There were several *Miscanthus sinensis* cultivars that were hit hard this year. 'Gracillimus' is very commonly used around here and is often a late bloomer, but this year it did not put out any flowers and a good portion of the foliage was browned prematurely.

Another one that folks usually love is *Miscanthus sinensis* Strictus, or Porcupine grass. The plants were much shorter than usual this year, did not flower, and were pretty unsightly overall.

Miscanthus sinensis 'Little Zebra' also seemed especially susceptible to heat stress. This is another really popular smaller *Miscanthus* that has done very well in past years, but was mostly brown and only had a few flowers by mid-October this year.

The perennial fountain grasses were quick to turn brown. Some didn't even bloom, like *Pennisetum alopecuroides* 'National Arboretum.' This is usually a very vigorous grass that would be overcrowding the plot and covered in fuzzy seedheads. It will be interesting to see how it overwinters after such a disappointing year.

Now on to some winners...

As far as the *Miscanthus sinensis* cultivars go, 'Adagio' was unfazed by the difficult growing conditions and looked as good as it usually does.

Another good one was 'Yaku Jima' which has a similar shape and look as 'Gracillimus' but as you can see in the picture, it was green and flowering when 'Gracillimus' was not.

It was fun to see the Switchgrass cultivars (*Panicum virgatum*) in their element. Most of them were growing as strong as ever despite no rain. Unlike many of the *Miscanthus*, the *Panicum* flowered at their regular times and provided some nice fall interest. Right now we have trialed 10 different cultivars, some are better than others. Some mentionable ones include two big cultivars, 'Cloud Nine' and 'Dallas Blues.' Cloud Nine is earlier to bloom and just a little bit bigger, while Dallas Blues has blue foliage with pink-tinged flowers.

'Northwind,' is a nice compact and upright variety that holds its shape well. It's been a favorite down at the John C. Pair Center's ornamental grass trial in Haysville. (The ones in our trial are only 2 years old, so they're not quite at full size yet.)

'Heavy Metal,' a blue foliage variety, looks healthy and is shorter at about 5'. Also impressive is 'Thundercloud,' which was very quick to establish itself and grew to a height of 7' in its second year.

We have noticed some re-seeding of a Switchgrass cultivar in the trial area. Unfortunately, it's hard to tell which one it is at the moment since we have so many in a relatively small area, but it's something to keep in mind when choosing your ornamental grasses. (RD) Editor's Note:

Images may be viewed on the KSU Turf Blog at:

<http://www.ksuturf.org/blog/2011/11/ornamental-grasses-not-blooming/>

Stressed About Your Trees? So Are They!



This summer's intense weather is undoubtedly affecting our trees this fall. Many unirrigated trees gave up their leaves a while ago. Under conditions of exceptional heat and drought, early leaf abscission is a common survival mechanism for many deciduous trees, so don't be too alarmed. However, your irrigated trees did not escape the summer unscathed either. Water, or no water, the intense heat throughout the state (and region) this summer had its impact. The stress is causing early defoliation and in some cases, altering the development of fall color.

Take a good look at your trees. Did they have good growth this year? Were there several inches of new growth at the shoot tips? Does the bark on the branches and trunk look healthy and have good color? Is early leaf drop the only suspicious sign? If yes,

then don't lose too much sleep over early defoliation. It may just be a sign of the summer stress. However, if there was little to no growth and you can see regions of dead tissue on the trunk and branches, then it may be time for some concern. Make sure trees go into the winter with soil moist at least 12 inches deep. In short, 2011 was an unusual year. Don't be surprised if your trees respond in unusual ways. If they were healthy going into fall, they should be healthy coming out of winter. (JG)

FRUIT

Winterizing Strawberry Plants



Winter can be a difficult time for strawberries in Kansas. Plants need time to become adjusted to cold weather and will gradually become more cold resistant as fall progresses. Strawberry plants are able to withstand colder temperatures in the middle of the winter than in the fall before they have gone through much cold weather. For example, if temperatures suddenly plummet below 20 degrees F before the plants harden to the cold, they can be severely damaged. A drop to 15 degrees F may kill

them. Hardened plants can withstand such temperatures with ease. This lack of hardening off may be a concern this year because of the unseasonably warm fall. If a sudden drop in temperature to below 20 degrees F is forecast, it maybe wise to mulch the plants as you would for the winter. After the cold snap is over, uncover the plants so they may continue to harden off.

Normally, strawberries should be mulched for the winter around Thanksgiving. However, if temperatures stay abnormally warm, give plants another couple of weeks to become cold hardy before mulching. Mulching plants helps protect strawberries not only from low temperatures but also from heaving damage. Heaving damage occurs when the alternate freezing and thawing common in Kansas winters heave plants out of the ground where they can die.

Wheat straw makes good mulch and is widely available. The straw should be spread over the plants to a depth of 3 inches. Shake the slabs of straw apart so there are no large compressed chunks. This straw mulch not only helps protect the plants over winter but can also help avoid damage from late spring frosts by delaying blooming a few days in the spring. Mulch should be removed gradually in the spring as plants begin new growth. Remove enough so leaves can be seen.

Leaving some mulch in place keeps the berries off the ground and conserves moisture. Also, mulch left in the aisles helps protect pickers from muddy conditions. (WU)

MISCELLANEOUS

Houseplants Losing Leaves



Homeowners often become concerned about their houseplants this time of year because they look unthrifty and may even shed leaves. Most of this is the plant responding to low light levels. Not only is the day length shorter, but the angle of the sun means sunlight must travel through more atmosphere before it reaches us in the northern latitudes. Each of these factors means less light energy reaches our houseplants. Houseplants respond to this stress by stopping growth and dropping leaves if necessary. So how can we tell if

leaves are being dropped due to stress or due to other factors? Normally, stress is the culprit if leaves are dropped throughout the plant so general thinning occurs.

The next question is what do we do about it? Adding supplemental lighting or just waiting until longer days and higher light levels allow the plants to recover are the only good choices. Unfortunately, people often decide the plant needs more fertilizer or water to perk it up. Remember the problem is low light, not a lack of fertilizer or water. Adding extra fertilizer or water won't help, and may actually harm the plant. The needs of the plant need to be balanced. If there is plenty of sunlight, the plant can use more water and fertilizer. Under low light levels, the plant doesn't require much fertilizer and the nutrients stay in the soil where they can build up and may eventually burn roots.

Also, excess water can drown roots. Therefore, it is important to do a good job of watering and fertilizing during the winter. Only water when the soil is dry $\frac{1}{2}$ inch deep in the pot. Eventually you can learn to judge whether a plant needs water just by weight. Also, reduce or eliminate fertilizing during the winter months. If the plant still looks thin in the spring, cut it back so it can put out new, thicker growth. Also, knock the plant out of the pot in the spring and make sure it isn't root bound. If it is, move it up to a larger pot. (WU)

Horseradish



Horseradish is ready to dig after a hard freeze kills the foliage (usually November or December). The large roots can be harvested while smaller, pencil sized roots can be cut in 6-8 inch long sections as 'seed' or 'sets' for next year's crop which are then immediately re-planted. Another option is to leave the horseradish in the ground and dig as needed. If you choose the latter option, be sure to heavily mulch the area so that the ground doesn't freeze.

To use horseradish, peel the large, fleshy roots and cut into sections. Use a blender or food processor to chop the roots along with a small amount of water and a couple of ice cubes. Vinegar or lemon juice is added to stop the process that produces the “bite” of horseradish. Add immediately after blending for a mild flavor or wait up to 3 minutes to give the horseradish more kick. Use 2 to 3 tablespoons of vinegar or lemon juice per cup of horseradish sauce along with ½ teaspoon of salt for flavor. Store ground horseradish in a tightly sealed jar in a refrigerator until ready for use. (WU)

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To view Upcoming Events: <http://tinyurl.com/fswqe>

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