Horticulture Newsletter
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Choosing a grass for Arkansas Lawns

No one type of grass is best suited to all situations. Avoid the trap of letting personal preference and the costs of establishment become the overriding factors in selecting a grass. Your choice of a lawn grass should be based on climate, sustainability, intended use and desired appearance. Cool-season (northern) and warm-season (southern) grasses are grown in Arkansas. Cool-season grasses grow best in the spring and fall and less actively in the summer. They stay reasonably green in the winter. Tall fescue (*Festuca arundinacea*) is the most commonly grown cool-season grass in Arkansas. Warm-season grasses are slow to green up in the spring, grow best in the summer and go dormant after the first heavy frost. Warm-season grasses grown in Arkansas include bermudagrass (*Cynodon spp.*), centipedegrass (*Eremochloa ophiuroides*), St. Augustinegrass (*Stenotaphrum secundatum*) and zoysiagrass (*Zoysia spp.*). Regardless of the region, the characteristics of each site and your goals will determine which types of grass are appropriate. Choose an adapted grass that best meets your preference for color, density and texture. Choose a tough, aggressive, wear-tolerant grass where heavy traffic is expected. Take into consideration the amount of time, effort and money you are willing to spend for turfgrass maintenance. Arkansas lies in the transition zone. What this means is that summer in Arkansas is too hot for cool-season grasses to perform well and winters are often cold enough to injure or kill warm-season grasses. Unfortunately, maintaining lawn grasses in the transition zone is more difficult than in many other parts of the United States. Table 2 indicates relative winter hardiness of warm-season turfgrasses in Arkansas. Winters in Fayetteville are too cold for St. Augustinegrass and centipede-grass, and the summer heat and humidity in Texarkana make it difficult to grow tall fescue. Zoysiagrass and bermudagrass are grown in all parts of the state. We rarely have winter damage to zoysiagrass, but cold weather injury to bermudagrass is not unusual. Warm-season grasses such as bermudagrass, centipede-grass, St. Augustinegrass and zoysiagrass have excellent heat tolerance. Among the cool-season turfgrasses, tall fescue has better heat tolerance than Kentucky bluegrass.

Black Spot of Rose

Black spot is caused by a fungus (*Diplocarpon rosae*) and is the most important disease of roses in Arkansas. Each year, rose growers need to take steps to battle this serious disease that affects most rose varieties. Hybrid tea roses are the hardest hit, although the fungus may infect all types. The optimum weather conditions for disease development are 75°-85°F with high relative humidity or rainy periods. When leaves remain wet for six or more hours, the fungus infects them. Canes can also be infected. Black spot is less of a problem under greenhouse conditions since relative humidity and temperature can be controlled. Leaf spots are the most characteristic symptoms. The black spots are round with feathered edges and are up to 1/2 inch across (Figures 1 and 2). Spots are mostly on the upper surface of the leaf and often have a yellow halo around them. When many spots are present on the leaves, they cause the leaves to turn yellow and fall off. Lower leaves usually become infected first. Excessive leaf drop from this disease weakens the plant, resulting in other problems. New spots can appear in as little as five days when conditions are favorable for infection. Cane symptoms of black spot are less obvious. Small, purple,
as five days when conditions are favorable for infection. Cane symptoms of black spot are less obvious. Small, purple, blister-like blotches appear on the canes. These blotches become black with age. Cane infections are very important in the survival of the fungus during the winter and are sources of infection in the spring as temperatures warm and rainfall increases. Periods of rainfall or any other source of overhead water that wets the leaves can lead to a flare-up of black spot. During wet periods, the fungus produces thousands of microscopic spores on infected leaves and canes, which can be carried to fresh leaves by wind or splashing water. Since the fungus can withstand a wide range of temperatures, infections may continue throughout the season as long as moisture is present on the plant. Planting resistant varieties is the most effective way to prevent black spot. Some of these varieties may develop a low level of black spot but will require less maintenance than those that are susceptible. A list of resistant varieties can be found at http://www.ext.vt.edu/pubs/plantdiseasefs/450-617/450-617.html. The degree of susceptibility may depend somewhat on local environmental conditions. Since the fungus can survive and continue to produce spores on fallen leaves and dying canes, good sanitation is an integral part of an effective control program. Dying or dead canes and fallen leaves should be removed and disposed of before new growth begins in the spring. If feasible, spotted leaves remaining on the plant should also be removed since these can also be a source of infection. Overhead irrigation that prolongs leaf wetness should be avoided if possible, since moisture is a significant factor for infection. If plants are irrigated overhead, watering should be done in the early morning hours to minimize leaf wetness periods. Use of drip tubes or soaker hoses is preferred. Always select a sunny location, well-drained soils and areas where there is good air movement to minimize leaf wetness.
Blueberry Spotlight

Blueberries can be successfully grown in all parts of Arkansas. There are three types of blueberries to consider, depending upon the part of the state that you live. The northern highbush type is better adapted to the northern part of the state, requiring cooler nights during maturation to produce the flavorful fruit. The northern highbush is also not very tolerant of high daytime temperatures during the summer months. Attempts to grow this plant further south have invariably resulted in the plants beginning to lose vigor after a few years and eventually dying or becoming less and less productive. Variety selection is very important in blueberries, particularly in relation to the intended use of the fruit. Due to the variable ripening habit, it is possible to harvest fresh fruit in central Arkansas from the end of May until late July. Each variety is harvested every seven days, with four harvests needed to get all of the fruit. Blueberries require a site free of bermudagrass and johnsongrass with good air drainage to prevent winter injury and frost damage and a soil that is acid and welldrained with medium to low fertility. In addition, blueberries require irrigation for optimum growth and fruit production. Ultimately, nonirrigated highbush blueberries will perish; the only question is when this occurs in the life of the planting. Non irrigated rabbiteye plants may survive but will have reduced yield and fruit quality in most seasons. Although blueberries are not as frost susceptible as some other crops, frost pockets should be avoided. Try to plant on a gentle slope or welldrained, level, high ground. A location on a slope may be subject to frost damage if surrounded by trees. Surface and internal soil drainage are essential, since standing water may kill the plants and poorly drained soils are conducive to soilborne disease problems. Blueberries require almost continuous optimum soil moisture conditions. This is more likely obtained from a loam or sandy loam top soil and a loam or clay loam subsoil. Gray and mottled subsoil indicates poor drainage. Poor soil drainage is often a severe problem even on a slope. Blueberries should be planted on a raised bed. This can be accomplished by mounding-up the planting row from several inches to a foot high and several feet wide depending on the potential for poor drainage. Plant no deeper than the pot level or nursery level.

The desired pH of soils artificially acidified for cultivated blueberries appears to be in the 5.0 to 5.2 pH range. A high pH soil to be planted to blueberries should be reduced to about pH 5.4 with the initial sulfur treatment. This should be done six months prior to planting. To acidify sandy soils, sulfur is recommended at the rate of 3/4 pound per 100 square feet for each full point the soil tests above the desired level. On heavier soils, use 1 1/2 to 2 pounds. Once proper acidity has been established, it can usually be maintained through the annual use of an acid fertilizer, such as ammonium sulfate. Yellowing or chlorosis of the blueberry foliage often occurs when the pH is too low or too high.