



This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

Vinca minor

Vinca minor is a fast growing, perennial, evergreen vine used extensively as a groundcover. It blooms in the spring for several weeks. Most blooms are blue, giving the vine the common name periwinkle, but there are cultivars that have white or purple blooms, and several attractive ones that have variegated leaves. A pervasive problem of vinca minor is Phoma stem blight caused by *Phoma exigua* var. *exigua*. Symptoms are black lesions on the stems. Small black pycnidia may be seen with a hand lens. When the lesion girdles the stem, stem wilting and death occurs. Wet weather and overhead irrigation favor disease development and spread. The disease usually slows down with hotter, drier weather. It helps to improve air circulation by pruning overhanging plants. Decaying and dead tissue should be removed from the bed if possible. Work should only be done in the beds when plant foliage is dry. Where the problem is severe, planting through perforated weed barrier to keep the vining parts from direct soil contact has proved helpful. Copper fungicides and mancozeb are among the fungicides that are effective. Sprays should be applied from bud break in the spring until midsummer.



Sherrie Smith University of Arkansas Cooperative Extension

Vinca Phoma stem blight



Sherrie Smith University of Arkansas Cooperative Extension

Annual vinca (*Catharanthus roseus*)

Another plant with the common name vinca or periwinkle is annual vinca, an extremely popular bedding plant, generally sold in packs in the spring. It blooms non-stop all season in a wide range of colors. Annual vinca is drought tolerant and can thrive in a range of soil types. It does best, however, with a pH of 5.4 to 5.8 and adequate soil moisture with good drainage. Good soil drainage is **critical** in vinca plantings. The most common problem of annual vinca is *Phytophthora* stem canker. Disease is favored by extended hot, wet weather, overhead irrigation, and excess amounts of fertilizer. The first noticeable symptom is yellowing and wilting of the foliage. Closer examination reveals stem lesions that are somewhat slimy to the touch. *Phytophthora* can spread rapidly through a planting. Fungicides are not very effective. Care should be taken to avoid less than healthy looking plants when buying vinca. Any wilting plants should be immediately removed from the planting. Overhead watering should



be discontinued or limited to absolute necessity. Watering early in the day will allow foliage to dry.



Howard F. Schwartz, Colorado State University, Bugwood.org

Phytophthora stem canker on vinca



Sherrie Smith University of Arkansas Cooperative Extension

Phytophthora stem canker on vinca



Jim Robbins University of Arkansas Cooperative Extension

Blackberry

Anthracnose, caused by *Elsinoe veneta*, can occur on leaves, petioles, pedicels, flower buds, fruit, and canes. On canes reddish purple circular to elliptical spots occur on primocanes in the spring. As the spots age, they enlarge and the centers become sunken, turning buff or ash gray, with purple margins. The lesions may merge, forming irregular blotches that girdle the cane. The cane may crack and die at that spot. Tip dieback may occur. The first signs of infection on the leaves are minute purple spots which later develop white centers. The center of the holes may later drop out, giving a shot hole appearance. Infected fruit are small, pitted, and slow to ripen. Control measures include the avoidance of excessive rates of nitrogen, and overhead irrigation. It is recommended that plants should be kept in narrow rows



(40-60cm wide) and thinned to allow for better air circulation. Weed control should be a priority as weeds reduce air movement in the planting. All pruned canes should be removed from the planting and destroyed as the fungus overwinters on both dead and live tissue. Liquid lime sulfur applied when the plants are breaking dormancy to when there is no more than 15mm of green tissue showing. Additional fungicides are recommended when canes are 15-20cm tall and at 14 day intervals thereafter. Captan, Pristine, and Switch are labeled for anthracnose on blackberry.

Blackberry anthracnose



Sherri Sanders University of Arkansas Cooperative Extension



Blackberry anthracnose



Sherri Sanders University of Arkansas Cooperative Extension

Corn

Wet conditions just before and after silking favor ear rot diseases of corn. Insect feeding increases the potential for ear rot. Control earworms with BT, or Spinosad, or Asana XI, or Permethrins. Spray before brown silk stage. Follow label for days before harvest.



Corn earworm



Sherrie Smith University of Arkansas Cooperative Extension

Kernel abortion



Keyon Branch University of Arkansas Cooperative Extension

Corn earworm damage



Keyon Branch University of Arkansas Cooperative Extension

It is not unusual to see kernels abort at the tip of the ear since they are the youngest and the farthest from the incoming food source. This occurs in the blister or early milk stages. Occasionally, kernels may abort in 2 or 3 columns that run the entire length of the ear. Basically, any kind of stress that reduces the photosynthate supply may cause kernel abortion. Drought stress is a major culprit.