

To: Local News
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Tumble Windmillgrass

Tumble windmillgrass stems are very flat and grow low to the ground. The flowering stalks are typically 3 to 16 inches tall. Tumblewindmill grass spreads by seeds, as well as stolons. It has a shallow fibrous root system, with most of the root mass less than 4 inches deep. Tumble windmillgrass also called windmillgrass is being a common nuisance. Tumble windmill grass is native to the United States. It can be found throughout Kansas and is also present in much of the central and southern plains. It is a warm-season perennial that has historically been a problem in turfgrass, but it has invaded no-till crop fields. It can be found in pastures and rangeland but is rarely considered a serious problem in those areas. It can be found in all soil types but tends to grow better in sandier soils. The plant gets its common name from the inflorescence, which detaches to become a tumbleweed. Tumble windmillgrass does hybridize with related species, which may result in some variation in plant features. The leaves of tumble windmillgrass are folded and very narrow. Mature leaves are generally hairless. The margins of the leaf sheath do not touch and have wispy hairs along the margins. Also, the margins of the leaf sheath tend to be lighter in color than the rest of the leaf sheath. In field studies conducted at K-State during the early 2000's, pre-emergence application of atrazine with acetochlor, dimethenamid, S-metolachlor, and isoxaflutole provided excellent control of recently-seeded tumble windmillgrass. Glyphosate and Group 2 herbicides like quizalofop and clethodim were effective on seedling tumble windmillgrass but did not control established plants well. Laboratory studies conducted to complement that field work indicated the cause of poor control by herbicides is that very little herbicide moved out of the treated leaf once plants are tillered. Shallow roots also contribute to poor control because they result in stressed plants that do not easily absorb herbicides during hot, dry conditions. Shallow roots are advantageous when using tillage to control tumble windmillgrass. In recent studies at K-State, one summer tillage event with a sweep plow effectively controlled tumble windmillgrass one month after tillage, with no effect on soil aggregates or soil organic carbon. The difficulty of controlling established stands means that scouting is an especially important component of managing tumble windmillgrass in order to control it before seedlings become established.

Pine Needle Blight and Tip Blight

Needle blight is a common and serious disease of Austrian and Ponderosa pines planted for windbreak and ornamental purposes. The disease causes premature dropping of pine needles the year following infection. Diseased needles exhibit dark green bands or scattered yellow to tan spots. The spots often enlarge and develop into red bands that encircle the needle. The red bands may be bordered by a light-yellow region. The tip of the needle beyond the red band eventually turns brown; the lower base remains green. Infection is most common to one-, two- or three-year-old needles, but current season needles also may show symptoms. Typically, the disease is most severe in the lower portion of the tree crown. Older needles are susceptible throughout the growing season. Heavy loss of older, inner needles plus the appearance of small black fruiting structures on needles in the spring are good diagnostic symptoms and signs of Dothistroma needle blight. Some copper-containing fungicides can be used for control of Dothistroma needle blight. Two fungicide applications in mid-May and mid-to late-June provide a more complete and dependable control.

Tip blight symptoms first appear in late May or early June. The newly developing shoots (candles) fail to grow. The shoots are stunted, and the emerging needles are stunted and turn yellow or tan. The damage usually starts in the lower part of the tree and works its way up over several years. In late summer or fall, tiny black spore-producing structures (called pycnidia) are formed on the scales of 2-year-old cones—it looks like black pepper has been shaken onto the cones. The critical time for chemical management is when the new shoots are expanding in the spring. Fungicides applied at that time can prevent new disease. Various copper fungicides are suggested for control of Tip Blight and Needle Blight.