

VENTENATA

This week we are going to talk about ventenata, the other big brother to cheatgrass. While ventenata has been in small scattered patches on rangeland in Montana since the mid 1990's and really was not exhibiting invasive qualities now it is exploding and did so in 2018. Ventenata went from being in 9 counties in western and southwestern Montana to 18 counties in 2018 and has gone from hundreds of acres to thousands of acres and is rapidly expanding.

Ventenata is a North African winter annual grass that favors cool, wet winters and hot, dry summers and can impact range, pasture, wild lands and annual crops. It was first found in the United States in the 1950's in Washington and Idaho and was first documented in Montana in the 1990's. Currently ventenata infests about 55,000 acres with counties that are right against Powell County including Missoula and Flathead.

Ventenata grows about 6 to 18 inches tall with a long, membranous ligule with reddish-black nodes along the stem. Seedlings and mature leaves are narrow and folded lengthwise. Ventenata seeds have bent and twisted awns, similar to wild oats.

How do you tell the difference between ventenata and cheatgrass? The leaves of cheatgrass are twisted and hairier than ventenata. Ventenata seedlings emerge later and are thinner, more needle-like and the awns are bent and twisted. When awns fall to the ground they unwind and self-bury or drill into the soil. Ventenata's panicle is upright and open in contrast to the drooping panicles of cheatgrass. Cheatgrass turns purple upon maturity while Ventenata remains green.

Because ventenata is an annual it spreads by seed. Each plant will produce 15 to 35 seeds per plant and dense stands can produce 2800 to 3700 seeds per square foot. Awns can easily attach to fur, clothing and machinery. Eighty-five percent of the seeds will germinate in the fall and most seeds are only viable for about 18 months. Some grasslands in Idaho that were dominated by cheatgrass are now infested by ventenata. As the plant matures it also become unpalatable for wildlife and livestock because it is high in silica. Because of its shallow root system, it can also create conditions conducive to soil erosion. It is estimated in Idaho that there can be up to a 50 percent reduction in forage yield and crop quality.

As far as control goes, identifying infestations early and maintaining healthy productive stands of perennial grasses is key. Mowing has limited success as the wiry grass and bent nature of the awns are difficult to cut and a second flush of seeds can also occur. Small infestations can be physically or mechanically pulled because of the shallow root system. Herbicides labeled for cheatgrass appear to have some success on ventenata but once again the toolbox for herbicide control on invasive annual grasses is limited. However, herbicides are most effective against ventenata when used in combination with other treatments such as prescribed fire and follow-up planting of competitive herbaceous species or fertilizing to promote perennial bunchgrasses. Generally, late fall application of herbicide, just after ventenata seedlings emerge, is most effective because it depletes ventenata's soil seed bank. Fall application of herbicide followed by spring application of fertilizer may increase ventenata control over herbicide use alone. Because fertilizing helps perennial bunchgrasses recover from herbicides, it may indirectly reduce ventenata numbers by increasing growth rates of associated bunchgrasses.

Early identification and eradication is key to controlling this highly invasive plant. If you think you have ventenata, the Powell County weed coordinator or myself can help with a positive identification.

For more information contact the MSU Powell County Extension Office at 846-9791

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