Moth Mullein

Moth mullein is a biennial plant (1-2 year life cycle) where during its 1st year of growth, its leaves develop as a basal rosette and the stem of the plant remains extremely short. The leaves of the rosette are oblanceolate with deeply toothed edges and are attached to the stem by short petioles. The rosette can grow to a diameter of 16 inches, with each individual leaf reaching a length up to 8 in. It forms a fibrous root system with a deep taproot.



In the 2nd year of growth, the stem of the mullein grows slender and erect, and can reach a height of 2 to 5 ft. The stem usually grows unbranched and leaves grow alternatively directly off the stem. The leaves are similar to the leaves of the rosette; however, they tend to be smaller and elliptical with shallow-toothed edges and have sharply pointed tips, leaves can reach a length of 5 in, dark green in color and glabrous (hairless).

The flowers are produced during the 2nd year of growth, and are found in loose clusters near the top of the flowering stem and attached individually to the stem by a pedicel. Each pedicel typically reaches a length less than 1 in. Flowers consist of five petals and five anther-bearing stamens. Flowers can be either yellow or white and typically have a slight purple tinge and stamens of the flower are orange in color and covered in purple hairs, reminiscent to a moth's antennae. It flowers from May to September and seed viability is reported to last 90 to 100 years.



Control: Control of this species is imperative before it flowers. Most broadleaf herbicides will show good activity; however, consult the District for a specific recommendation to fit your specific needs and a positive identification. Pulling can be effective control technique pre-flower; clip and burn the flowered parts and developing seed heads if present being careful not to spread them.

County Impact: Moth Mullein was first found in Johnson County along I-90 North of Buffalo during the 2016 treatment season. Flowered plants were present indicating the infestation had been there at least 2 years. Infestations have been reported in Natrona and Sheridan Counties along the interstate, as well as, along I-90 in Montana.