



# INVASIVE ALIEN SPECIES

## Field Scabious (*Knautia arvensis*)

aka Blue Buttons, Gypsy Rose, Pincushion Scabious

**SK Provincial Designation:** Prohibited

### Overview:

Field scabious is a highly invasive perennial plant native to Europe. It was introduced to North America as an ornamental plant and for medicinal use in the treatment of scabies and other skin afflictions. Once established, field scabious is very difficult to eradicate, requiring persistent and diligent control work. Each plant produces thousands of seeds that can remain viable in the soil for many years.



PHOTO: Rafikk, Wikipedia.org

### Habitat:

Field scabious prefers grassy, nutrient-rich, dry soils but can establish in many environments, including undisturbed areas. It is often found in both pastures and roadsides.



PHOTO: Kurt Stuber, Wikipedia.org

### Identification:

**Stems:** Stems are erect and hairy and can grow up to 1.5 metres tall. The plant has an extensive, woody taproot that is often branched just below the surface.

**Leaves:** Leaves are hairy and coarsely toothed. Leaves growing at the base of the plant are 10 to 25 centimetres long and get smaller moving up the stem.



PHOTO: Fornax, Wikipedia.org

**Flowers:** Flower heads are similar to clovers and can range from violet-blue to pale blue or white in color, growing on the end of long, leafless stalks. Field scabious typically flowers between July and September.

**Seeds:** Each plant is capable of producing up to 2,000 seeds that can remain viable in the soil for many years. The seeds are hairy and 5 to 6 mm long.

### Prevention:

Field scabious is often introduced as an ornamental planting used to attract butterflies. Do not purchase or grow field scabious or other invasive plants; ask the Saskatchewan Invasive Species Council for information on appropriate alternatives to invasive plants. Since this plant prefers grassy areas such as hay-fields, use caution as dispersal can occur in baled forage. Maintaining healthy cover through moderate grazing, fertiliza-

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## Field Scabious (*continued*)

### Control:

**Grazing:** Field scabious is not palatable to grazing animals when in its flowering stage but cattle may graze on young plants. Invasive plants should not be considered as forage.

**Cultivation:** Discing before the plant begins to flower can be effective in cropland areas. Heavily infested pastures and hayfields can be cultivated and rotated to an annual crop for effective control.

**Mechanical:** The best strategy for controlling this plant is to prevent seed production. Mowing can be effective to prevent seed production if timed appropriately (before seed set) and repeated during the season after re-sprout. Seed bank reduction through mowing requires persistence and diligence but reduction of seeds is a beneficial strategy in the long term. Hand-pulling is difficult due to the deep taproot, and broken stems will re-sprout. Wear long sleeves and gloves if handling this plant as it may cause skin irritation.

**Chemical:**<sup>1</sup> The use of pesticides in any manner not published on the label or registered under the Minor Use of Pesticides regulation constitutes an offence under both the Federal Pest Control Products Act and provincial acts in Saskatchewan. For the latest information on pesticides for agricultural use in Saskatchewan, please consult the provincial Guide To Crop Protection produced annually by the Saskatchewan Ministry of Agriculture or consult your local Ministry of Agriculture representative.

**Biological:** Currently, there is no biological control for field scabious available in Canada.



PHOTO: Sten, Wikipedia.org



PHOTO: Prazak, Wikipedia.org

### Sources:

Field Scabious Fact Sheet. Alberta Invasive Plants Council. [www.invasiveplants.ab.ca](http://www.invasiveplants.ab.ca)

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Integrated Weed Management: Field Scabious (*Knautia arvensis*). British Columbia Ministry of Agriculture. [www.agf.gov.bc.ca](http://www.agf.gov.bc.ca)

*Knautia arvensis*. Wikipedia: The Free Encyclopedia. 2013. [www.wikipedia.org](http://www.wikipedia.org)

<sup>1</sup> Always follow the product labels. Pesticides should only be applied by certified pesticide applicators. The use of pesticides in any manner not published on the label or registered under the Minor Use of Pesticides regulation constitutes an offence under both the Federal Pest Control Products Act and provincial acts in Saskatchewan. For the latest information on pesticides for agricultural use in Saskatchewan, please consult the provincial Guide To Crop Protection, produced annually by the Saskatchewan Ministry of Agriculture.



PHOTO: Darkone, Wikipedia.org