



INVASIVE ALIEN SPECIES

Baby's Breath (*Gypsophila paniculata*) aka Maiden's Breath

Provincial Designation: Noxious

Overview:

Baby's breath is a perennial that reproduces by seed only. It is native to Eastern Europe & western Asia and was likely introduced as an ornamental. It develops deep tap root that can extend to 4m¹ allowing it to access deeper groundwater during periods of drought. The stems die off in winter and new stems sprout from root crown each spring. This is the airy, white flowered plant used extensively by the flower industry as bouquet filler and sold for dried arrangements.

In winter stems break off and tumble with the wind, spreading seed – a single plant can produce 1000s of seeds. Baby's breath is distributed throughout North America – in Alberta it is most common in the drier southern and eastern parts.³ Also, it has become an invader of the shifting sand dunes in the Great Lakes area. Its deep root system over-stabilizes the habitat for native species and allows it to out-compete native species.⁵

Another introduced *Gypsophila*, *G. elegans* (annual/Showy Baby's breath), is used by floristry and considered to be an invasive annual in some parts of the US. Many are double flowered and have pink to maroon petals.² This species is often an ingredient of wildflower mixes.

Habitat:

Baby's breath grows in fine to coarse soils – the tap root grows best in coarse soil – and prefers alkaline soils. It requires full sun and is adapted to arid climates – it is drought tolerant once established.



Identification:

The entire plant is covered with greasy hairs and has a thick, fleshy taproot.

Stems: Stems are erect, single to many, bluish-green, and grow to 0.4 to 1m. They are highly branched near the crown and stems are swollen at the nodes.

Leaves: Leaves grow from the nodes, are opposite, lance shaped, and 2 to 9 mm wide. They can be smooth or slightly hairy and occur mainly on the upper parts of stems.

Flowers: Flowers are white (rarely light pink), have 5 petals, and 6-8mm in diameter. Numerous flowers are borne on short (1-20mm) stalks in highly branched inflorescences. Fruits contain 2 to 5 black seeds.

Prevention:

Simply do not grow it, and dispose of Baby's breath found in fresh or dried arrangements in landfill bound garbage – many infestations have been found down wind from cemeteries. This plant can invade sandy-soiled hay fields, so baled, infested forage can be a pathway for its spread.

Control:

Grazing: Older plants can tolerate light grazing.⁴ *Invasive plants should never be considered as forage.*

Cultivation: Plants can tolerate shallow tillage but extensive cultivation can effectively control an infestation.⁴

Mechanical: Mowing can prevent seed production but is not an effective control method as plants will re-sprout. Baby's breath is very difficult to hand pull because of its deep tap root – sever the root below the root crown (several cm below ground level) otherwise will re-sprouting will occur.



Chemical:⁶ Glyphosate and dicamba has been used, but it is hard to get good coverage because of the sparse foliage. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: None researched to date.

¹ Flora of North America. *Gypsophila paniculata* www.eFloras.org

² Flora of North America. *Gypsophila elegans* www.eFloras.org

³ McClay, A. 2008. Risk assessment fact sheet for baby's breath, *Gypsophila paniculata*

⁴ California Dept. of Food & Agriculture.

⁵ Emery, S. 2006? Baby's Breath removal monitoring project. In collaboration with TNC-MI and Sleeping Bear Dunes National Lakeshore.

⁶ Always follow the product labels. 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 *Alberta's Environmental Protection and Enhancement Act*.