

BABY'S BREATH

Gypsophila paniculata
(Aka Maiden's breath)



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 a 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. 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:

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: 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: 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 downwind from cemeteries. This plant can invade sandy-soiled hay fields, so baled, infested forage can be a pathway for its spread. Always check wildflower mixes for invasive species before planting.

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 re-sprouting will occur.

Chemical: Aminopyralid, glyphosate, 2,4 D, chlorsulfuron, imazapic, metsulfuron, and dicamba are registered for use on baby's breath. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pesticide Management Regulatory Agency. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: None researched to date.

References:

- 1 FloraofNorthAmerica.Gypsophilapaniculatawww.eFloras.org
- 2 FloraofNorthAmerica.Gypsophilaeleganswww.eFloras.org
- 3 McClay, A. 2008. Risk assessment fact sheet for baby's breath, *Gypsophila paniculata*
- 4 CaliforniaDept.ofFood&Agriculture.
- 4 Emery, S. 2006? Baby's Breath removal monitoring project. In collaboration with TNC-MI and Sleeping Bear Dunes National Lakeshore

