

Baby's breath (*Gypsophila paniculata*)

History: Baby's breath is native to Eurasia and was introduced to North America as an ornamental. It is a showy plant that is still used as an ornamental in some parts of the United States and is popular in the cut flower industry. The first recorded introduction of this species was in the Canadian province of Manitoba in 1887, and in 1953 its weedy attributes were noted in Saskatchewan. It is now widespread across Canada and the northern U.S.

Identification: A member of the Pink (Caryophyllaceae) family, baby's breath is a multi-branched, perennial forb that can grow up to 3' tall; often the plant appears globe-like in shape due to its branching nature (Fig. 1). Leaves are opposite, lance-shaped and arise at swollen nodes (a characteristic of the Pink family) (Fig. 2). The number of leaves decreases with increasing plant height and during flowering. Sweetly-scented flowers are small and white with 5 sepals and 5 petals (Fig. 3). Fruits occur as small capsules that contain 2 to 5 black, kidney-shaped seeds. It has a taproot.

Impacts: Baby's breath can form dense stands and displace desirable grasses and forbs. Because of the large taproot and ability to produce millions of seeds, this plant is difficult to remove once established. It is reportedly mildly toxic to cats and dogs due to the toxin gyposenin, which causes irritation to the gastrointestinal tract. On a positive note, baby's breath has been associated with an increase in arthropod abundance and diversity, livestock can eat baby's breath in the vegetative phase, and there are reports that saponins found in the root system may increase the efficacy of cancer drugs.

Habitat: Although it can persist in many types of habitats, large populations most often occur in coarse-textured soils in pastures and hayfields, lightly to heavily grazed rangelands, roadsides, and other disturbed habitats. It is often found in high densities along fence lines or in ravines due to its tumbling habit.

Spread: Baby's breath reproduces by seed. Each plant can produce nearly 14,000 seeds that are loosely held in capsules, and most drop off near the parent plant. Individual plants often break off at the base at maturity and tumble in the wind, spreading remaining seeds up to 1 km. Seeds display little dormancy, and the little documentation available suggests they may remain viable for about two years. Baby's breath occasionally regenerates from pieces of the root crown.

Management: In Montana baby's breath is not on the state noxious weed list but is listed as a county noxious weed in the following counties: Blaine, Broadwater, Chouteau, Daniels, Deer Lodge, Flathead, Jefferson, Richland, Sheridan, Silver Bow, and Valley. Since 1934 it has been reported in 22 counties in Montana. Because it is not widely distributed across Montana, early detection and rapid response is the management priority for most of the state. Hand-pulling or digging is effective, but difficult due to the plant's relatively large taproot. Mowing before seed development will help to control baby's breath, but it will not kill it. Herbicides that contain metsulfuron methyl (e.g. Escort, Ally, Cimarron, Chaparral) are effective when applied during the bolt to pre-flower growth stage.



Figure 1. Plant, demonstrating globe-like growth form.

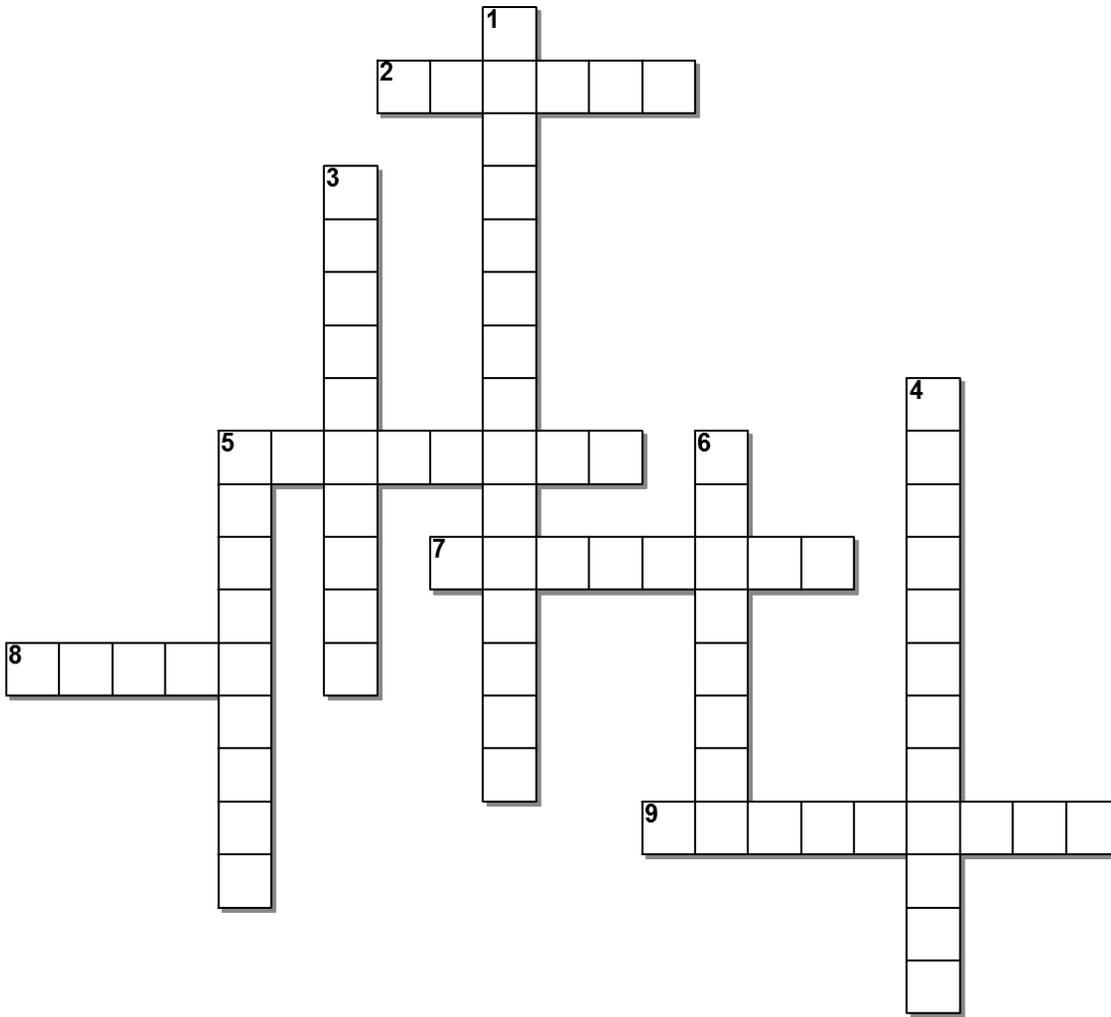


Figure 2. Leaves arising from swollen nodes.



Figure 3. Small white flowers.

Test your knowledge of baby's breath



Across:

- 2 These decrease in number as the plant grows
- 5 Baby's breath plants are shaped like this
- 7 Canadian province where baby's breath was first documented in North America
- 8 Tumblin' along with the tumblin' tumbling weeds, a brilliant way to spread these
- 9 Bought a bouquet for a loved one lately? If so, you may know that this industry is keen on baby's breath

Down:

- 1 Baby's breath is a member of this plant family
- 3 Although it kind of bugs us, baby's breath has been associated with an increase in these
- 4 Look for these along the stem, a characteristic of Pinks
- 5 Toxin found in baby's breath; keep Fido away!
- 6 One of 10 Montana counties where baby's breath is a noxious weed

Solutions are posted to the MSU Extension Invasive Rangeland Weed website:
<http://www.msuextension.org/invasiveplantsMangold/extensionsub.html>

