

Nature's Notebook Phenophase Photo Guide



Monarda fistulosa

Wild Bergamot



Why Observe? Wild bergamot is native to nearly all states in the U.S. This showy flower provides nectar for birds, bees, and butterflies, and is especially important to certain species of sweat bees and monarch butterflies. Historically this plant was used to treat a wide range of medical issues from headaches to colds, digestive issues, and respiratory infections. The leaves are sometimes still used to make teas.

Tips for Identification: Like many species in the mint family, this plant has square stalks. It has opposite leaves that are triangular-shaped. Clustered lavender flowers grow at the top of the stalks, and can sometimes vary from white to pink. The stems can reach 2-5 feet high.

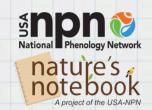
Be aware there is variation from individual to individual within a species, so your plant may not look exactly like the one pictured. If you are uncertain whether or not a phenophaseis occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



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Initial growth

New growth of the plant is visible after a period of no growth (winter or drought), either from above-ground buds with green tips, or new green or white shoots breaking through the soil surface. Growth is considered "initial" on each bud or shoot until the first leaf has fully unfolded. For seedlings, "initial" growth includes the presence of the one or two small, round or elongated leaves (cotyledons) before the first true leaf has unfolded.



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Leaves

One or more live, fully unfolded leaves are visible on the plant. For seedlings, consider only true leaves and do not count the one or two small, round or elongated leaves (cotyledons) that are found on the stem almost immediately after the seedling germinates. Do not include fully dried or dead leaves.



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Flowers or flower buds

One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds or inflorescences that are swelling or expanding, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.



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Open flowers

One or more open, fresh flowers are visible on the plant. Flowers are considered "open" when the reproductive parts (male stamens or female pistils) are visible between or within unfolded or open flower parts (petals, floral tubes or sepals). Do not include wilted or dried flowers.



<u>Darrel Brown via</u> <u>iNaturalist. CC BY-NC 4.0</u> <u>(cropped)</u>

Fruits

One or more fruits are visible on the plant. For *Monarda fistulosa*, the fruit is a nutlet, tightly clustered with several other nutlets and enclosed in a spent flower base (calyx), with many such spent flower bases clustered together. The spent flower base changes from green to tan or brownish. Do not include flower bases that have already dropped all of their nutlets



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Ripe fruits

One or more ripe fruits are visible on the plant. For *Monarda fistulosa*, a fruit is considered ripe when the spent flower base enclosing it has turned tan or brownish. Do not include flower bases that have already dropped all of their nutlets.

Phenophases not pictured: Recent fruit or seed drop