

## **Bee-Friendly Flowers: Bee Balm**

Monarda didyma or **bee balm** is a stunning summer bloomer in the mint family. Plants in the mint family are easily identified by their square stems, strong aromas, and opposite leaves. The scientific name of the species, *didyma*, literally means "in pairs". Bee balm, and all flowers in the mint family, also have a distinctive structure; they look like open-mouthed tubes with upper and lower lips. In the case of bee balm, the inflorescence consists of a crown of multiple, fire-engine-red trumpets. The lower lip acts as a landing platform for insect pollinators to access the pollen on the protruding anthers and to probe the nectaries at the base of the tubes.



The name suggests bees love these flowers most, but hummingbirds are actually are best suited to feed on and pollinate bee balm. Because of the structure of the flower tubes, long tongues are required to be able to reach the nectar. Its dazzling color also makes it a hummingbird magnet! Besides hummingbirds, many butterflies and moths can get to the nectar, but most bees can't. They often cheat by chewing holes in the bases of the flowers and stealing the nectar that way.

The name of the genus, *Monarda*, honors an early botanist, Nicolas Monardes (1493-1588) of Seville in Spain, a botanist and physician who published a massive work on the medicinal uses of New World botanicals. The tome had a wonderful title in its English translation; *Joyful News Out of the New Found World*. Monardes never left Spain, but had explorers collect plants and reports about them for him. Here in the west, Native Americans historically had many uses for bee balm and it's close relative, the purple-colored bergamot, *Monarda fistulosa*. They used them to treat headaches, colds, sore throats, bronchitis, nausea, vomiting, and even acne. It was also used to soothe bee stings and insect bites, hence the name bee balm!

Colonial American and European herbalists, in keeping with the Doctrine of Signatures, believed that bee balm was a strong blood purifier because of its bright red color. The connection to blood gave it the name scarlet beebalm and crimson beebalm. Another common name for this plant is Oswego tea. This comes from the Oswego tribe in



upstate New York, who taught the early settlers how to make bee balm into an herbal tea to treat chills and fevers. In addition to its medicinal uses, American colonists drank the tasty bee balm tea as a replacement for black tea after high British taxation resulted in the Boston Tea Party and the American Revolution. Once again, the impact of Native American herbal wisdom on American history cannot be understated.

Today, bee balm is a natural source for the antiseptic thymol, which is the active ingredient in many modern mouthwashes like Listerine. Dried leaves and flower heads are still used to make aromatic teas and the fresh leaves are used to add flavoring to foods. Essential oil from the plant has a fragrance comparable to ambergris, an ingredient in many perfumes. It's also an aroma that attracts pollinating insects to visit the flowers.



## **Duke Farms Connection**

At Duke Farms, bee balm is planted in the round cement fountains on both sides of the Old Foundation. Visit on a sunny day in July and August and you may see the beds sparkling with rubies, ruby-throated hummingbirds, that is!

Want to grow bee balm in your garden? Buy plants from native nurseries and never collect them from the wild! <u>The Native Plant Society of New Jersey</u> is a great resource to help you find where to buy them or to get more information.

## **Questions and Answers**

- 1. Which pollinators have tongues long enough to reach the nectaries at the base of bee balm flowers? *Answer: Hummingbirds, butterflies, and moths, but very few bees.*
- 2. Why is this plant called bee balm? Answer: Native Americans used it to soothe bee stings and pollinators do love it.

3. The scientific name is *Monarda didyma*. What does the Genus name refer to? What does the species name refer to?

Answer: Monarda is named for an early Spanish botanist/physician, Nicolas Monardes, who wrote about medicinal uses of New World plants in the 1500s. Didyma means in pairs, referring to the placement of leaves on the stem.

4. Native Americans had many medicinal uses for bee balm - name three. Answer: They used it to treat fevers, bronchitis, and bee stings

5. The scarlet color of the flower made early physicians believe the plant could be used for what treatment?

Answer: As a blood purifier.

6. What other *Monarda* was also used for medicinal purposes? What is the common name? *Answer: Monarda fistulosa or bergamot.* 

7. Yet another common name for bee balm is Oswego tea. How is this plant important in the history of the United States?

Answer: The Oswego Native American tribe showed settlers how to make tea from bee balm to treat fevers and chills. This tea was also tasty and served as a substitute for black tea during the American Revolution.

- 8. Bee balm is a source for what antiseptic ingredient in mouthwashes? Answer: Thymol
- 9. Where is a good place to see hummingbirds and bee balm at Duke Farms? Answer: The Old Foundation where bee balm is planted in the old fountains.



## Bee Balm Additional Resources

- USDA Scarlet Beebalm Fact Sheet
- Bee Balm, Lady Bird Johnson Wildflower Center
- Oswego Tea
- Bee Balm in New Jersey Gardens
- Bee Balm in history