

Fertilization

Seedlings should be fertilized with a slow release fertilizer, such as Osmocote®, by placing small quantities of the fertilizer in each seedling cell. Less is more when adding fertilizers to young plants and it's better to under fertilizer than to over fertilizer in order to prevent burning young plants. Established plants in containers should require no more than a teaspoon or two of Osmocote® every month or two. Soil tests should be taken on field site locations to determine existing fertility. Amendments can be made based on soil test results, or a balanced fertilizer can be spread in early spring and late fall at a rate of 100 pounds per acre.

Irrigation

Beebalm thrives on dry sites and will not need irrigation except in extreme droughts or during establishment. As previously stated, this species is sensitive to over watering and should only be watered when the plants show signs of drought stress, such as dropping or wilted leaves.

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Monarda Punctata

Species Information

The genus Monarda is comprised of many species. Plants within this genus are commonly called beebalm. They are members of the mint family and the foliage is aromatic when crushed. Common names of plants in this genus include Beebalm, Lemon Beebalm, Horsemint, Purple Horsemint, Spotted Beebalm, Purple Lemon Mint, and Lemon Mint. Beebalms are excellent for pollinators and are utilized by a wide array of butterflies, bees, flies, and wasps. They are also culturally significant to several groups of Native Americans and were used medicinally for a wide array of aliments.

The most common species found in East Texas are Monarda punctata, Monarda citriodora, and Monarda fistulosa. They can be annuals, biennials, or perennials depending on species. For cultivation purposes, Monarda punctata would be best suited for long term cultivation. It is important to note that these species are heavy seeders, especially the annual species, and can increase rapidly and dominate an area.

Soils

Monarda species will tolerate a wide array of soil conditions and have a wide range of adaptation, but favor dry, sandy soils with a slightly acidic to neutral pH.



Propagation

Monarda can be harvested in late summer by collecting mature seed heads and placing them in breathable sacks such as cotton or paper. Seed heads can then be spread on a tarp in an air-conditioned room to fully dry and release seed. Seed can be separated by gently shaking and thrashing the dried heads and using a fine screen to separate seed from inert matter. The USDA NRCS East Texas Plant Materials Center has a wide array of seed cleaning equipment and can aid in seed cleaning if necessary.

Once seed is separated, it should be cold stratified. This can be done by storing the seed in Ziploc® bags with damp sand or moist paper towels in a refrigerator for 3 months. Stratified seed can then be planted into seedling trays or propagation cells in a greenhouse or high tunnel house, making sure not to plant deeper than 1/8th inch. Potting media should be mixed with sand and/or perlite to facilitate drainage. Germination should occur in one to two weeks. This species is sensitive to over watering and excessive moisture. Seedlings should only be watered when media is dry to the touch. Stratified seed may also be spread on desired field sites in early spring after threat of frosts.

Propagation (continued)

Unstratified seed can be spread on field sites as soon as it is cleaned and will stratify naturally during winter. Seedlings may be difficult to differentiate from annual weed species during establishment. Planting containerized material allows for herbicidal control of weed species and decreases competition on young plants as they establish. Sites can be treated with pre-emergent herbicides before transplanting containerized plants to reduce weed competition.

Plants may also be propagated from cuttings by clipping stem tips from May through August.



- Remove all the lower leaves from the clipping and dip the cut end in rooting hormone.
- Plant the stem of the clipping in a well-drained media and cover with a clear plastic bag or plastic lid.
- Mist several times a day and keep out of direct sunlight.
- Rooting should occur in a few weeks.
- They may then be transplanted to containers and grown in a greenhouse or high tunnel until root bound and ready for transplanting to field sites.

Plan of Action

- Late Spring 2021, locate stands of beebalm in wild.
- Summer 2021 collect seed heads.
- Mid-summer 2021, thrash out seed from seed heads and clean seed.
- Spring 2022, plant seed in high tunnel or sow on the prepared field site.