



The Dallas Arboretum and Botanical Garden, a gem of the Metroplex situated on 66 acres, hosted more than a million visitors in 2016. Martha Stewart called it one of the most beautiful and colorful botanical gardens in the world.

## EXPANDED SHALE USED AT DALLAS ARBORETUM

The Dallas Arboretum and Botanic Garden is home to one of the largest floral planting displays in the Southwestern United States with over 2.9 million annual bedding plants, yearly attendance exceeding 500,000, and visitors from 50 countries.

**T**he mission of the Dallas Arboretum and Botanical Garden is to build a public garden and arboretum which promotes the art, enjoyment, and knowledge of horticulture, while providing opportunities for education and research. It is situated on 66 acres and houses the DeGolyer Estate and Camp Estate.

Living proof of their commitment to education and research is the plant trials garden and testing program. Under the direction of Jimmy Turner, its main focus is to grow and evaluate many different plants in the drastic climate of the Metroplex and North

Central Texas, and develop new plant selections. His staff tabulates data on 3,000+ plants yearly, from annuals and perennials to tropicals and bulbs, trees and shrubs. Unlike other research gardens it is open to the public with the research information freely provided to growers, landscape professionals, breeders, and general plant enthusiasts. It is recognized both regionally and nationally for the service it provides.

### A FAVORITE SINCE 2003

Expanded shale has been a favorite in the plant trial garden since 2003. Jimmy transformed the heavy black clay soils using three inches of

expanded shale and three inches of compost tilled to a depth of 6-8". He created all the raised beds in this fashion to promote drainage.

**The expanded shale works to introduce air into the tight clay structure thereby improving soil porosity and drainage.**

Because it has been manufactured under intense heat, expanded shale does not contain any foreign pathogens or weed seeds. It is porous, lightweight and durable, able to absorb water and nutrients without breaking down like other amendments.

When used with organic matter and a top mulch layer it helps regulate soil temperatures and significantly reduces the demand for irrigation.

Another educational display at the Botanical Garden is the WaterWise landscape located south in the garden. Created in partnership with the Texas Nursery and Landscape Association, the garden demonstrates that great looking landscapes that use less water can be created by following such WaterWise principles as: careful planning and design, soil evaluation and improvement, practical choices for turf related to use, use of native or locally adapted plants, efficient irrigation design, the use of mulches, and appropriate maintenance practices. Expanded shale is part of TNLA's recommendation for improving clay soils.

The use of expanded shale continues elsewhere on the property. New garden developments such as the Red Maple Rill – a collection with over 80 varieties of Maples and 200 trees began with soil development using approximately 15% expanded shale. Likewise, the new children's garden will utilize expanded shale in mediums for the green roof

and various planting beds. Other applications at the Dallas Arboretum and Botanic Garden include:

Container Plantings – Depending on the plant type, the percentage of expanded shale in the potting mix varies. Agaves, for instance, use 80% expanded shale while most others have 15-20% in the potting mix. This lightweight material gives body to the planting mix, absorbs moisture and promotes drainage.

Raising Low Spots in Turf – Small amounts of expanded shale can be added over time to raise low spots in turf. This is a slow but effective process.

Getting the soil details right enhances everything in the garden and helps to establish the Dallas Arboretum and Botanical Gardens as a premier destination worthy of study and enjoyment. Go experience what thousands of yearly visitors already know and love about the gardens. Information and event schedules can be viewed at [www.dallasarboretum.org](http://www.dallasarboretum.org).