Texas Superstar® Program

- Using Technology to Promote the Use of Well-Adapted Plants for Landscapes

in High Temperature Regions with Limited Water Resources -

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Abstract: For more than 20 years the Texas Superstar® program has provided marketing assistance to the nursery industry by promoting the use of well-adapted landscape plants with proven performance in most regions of Texas, which is characterized by high growing season temperatures and limited water resources. The four major plant trial sites for the program are located in College Station (post oak savannah, USDA plant hardiness zone 8b), Lubbock (high plains, USDA plant hardiness zone 7b), Overton (piney woods, USDA plant hardiness zone 8a/8b) and San Antonio (hill country, USDA plant hardiness zone 9a). These sites represent major differences in ecological zones near major population centers in the state. Based primarily upon performance at these sites, the best plants are designated for promotion as Texas Superstars® by the Texas Superstar® Executive Board. In the past, only limited information has been provided regarding water use of Texas Superstar® plants. Because of dwindling water resources for Texas landscapes, however, we are now categorizing Texas Superstar® plants by their water requirements. To make this information more widely available, we are updating and redesigning a brochure that is being published in cooperation with the Texas Nursery and Landscape Association and the Texas Department of Agriculture. The brochure has a listing and description of each plant in the program. In addition, we are producing QR (Quick Response) bar matrix codes that are included in the brochure that link to plant pages and videos which show the attributes of each plant and indicate the relative drought tolerance of individual plants. The brochures are being distributed at trade shows and other industry events, in retail settings, and at consumer education conferences around the state. The QR codes can also be included on plant tags and point of purchase information material in garden centers to allow consumers to look at information about the plants as they shop for the best plant to use in home landscapes. Recent feedback from Texas Superstar® program beneficiaries indicates an expected benefit of about $1.6 million for consumers due to an increased emphasis on choosing the most drought tolerant plants for use in arid regions, with the ultimate goal of maintaining functional landscapes with limited water requirements.

Key Words: Landscape plants, Marketing, Nursery industry, QR codes, Water

1. Introduction

For more than 20 years the Texas Superstar® program has provided marketing assistance to the nursery industry by promoting the use of well-adapted landscape plants with proven performance in most regions of Texas, which is characterized by high growing season temperatures and limited water resources. The four major plant trial sites for the program are located in College Station, Lubbock, Overton and San Antonio. These sites represent substantial differences in ecological zones (Arnold, 2008; Diggs *et al*., 1999; Wasowski and Wasowski, 1997) near major population centers in the state (**Figs. 1** and **2**). The objective of this paper is to briefly review the program and highlight how information technology

is being used to promote the use of landscape plants that are well-adapted to high temperatures and limited water availability.

2. Materials and Methods

Based primarily upon performance at the test sites, the best plants are designated for promotion as Texas Superstars® by the Texas Superstar® Executive Board (Arnold *et al*., 2001; Mackay *et al*., 2001). Several years ago, a brochure was published in cooperation with the Texas Department of Agriculture Go Texan® Program and the Texas Nursery and Landscape Association. Recently this 16 page, full color brochure has been updated with more recent plant promotions, but also with some important additions that enhance the
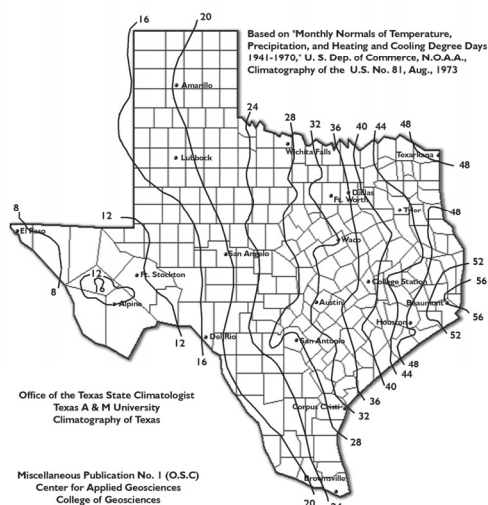
Fig. 1. The major trial sites for the Texas Superstar® Program are, from least precipitation to the most, Lubbock, San Antonio, College Station and Overton (located near Tyler).
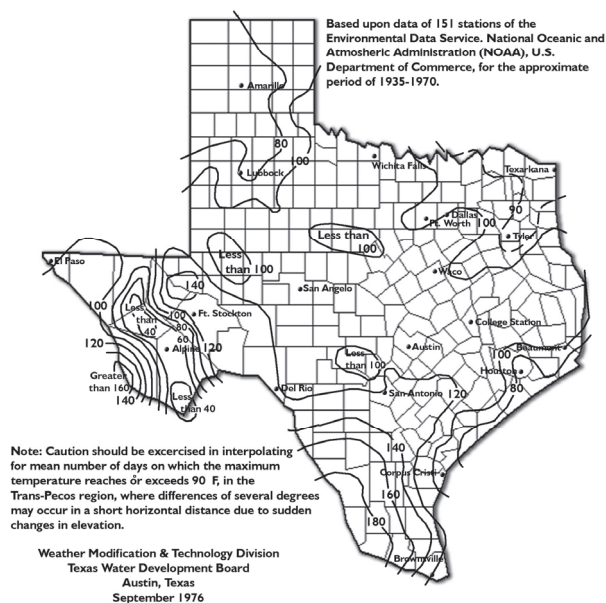

Fig. 2. Extended periods of elevated temperatures exacerbate limited precipitation in most of the state, including the four primary test sites, Lubbock, San Antonio, College Station and Overton (located near Tyler).

Fig. 3. Description of the Texas Superstar® Program on an example page from the new brochure.

Fig. 4. Example of a QR code for the Texas Superstar® Gold Star Esperanza, used in the brochure.
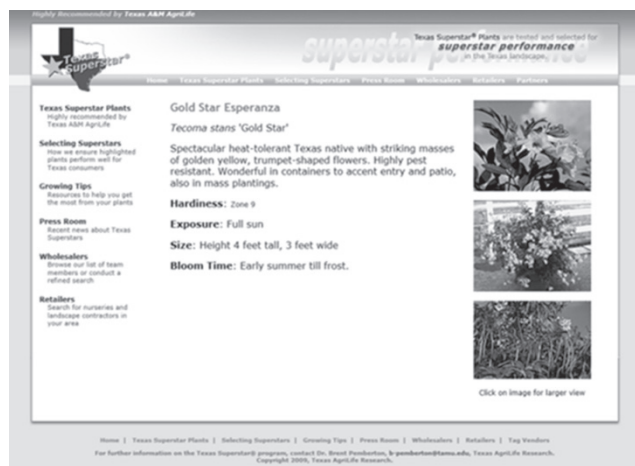

Fig. 5. Example of a plant page that is accessed at www. texassuperstar. com from the QR code in Figure 4.

information available about each plant and improve the educational value of the brochure (**Fig. 3**).

QR (Quick Response) bar matrix codes were produced that are included in the brochure (**Fig. 4**). The codes link to plant pages at www.texassuperstar.com which show the attributes of each plant (**Fig. 5**). The QR codes can also be included on plant tags and point of purchase information material in garden centers to allow consumers to look at information about the plants as they shop for the best plant to use in home landscapes.

In the past, only limited information has been provided regarding water use of Texas Superstar® plants. Because of
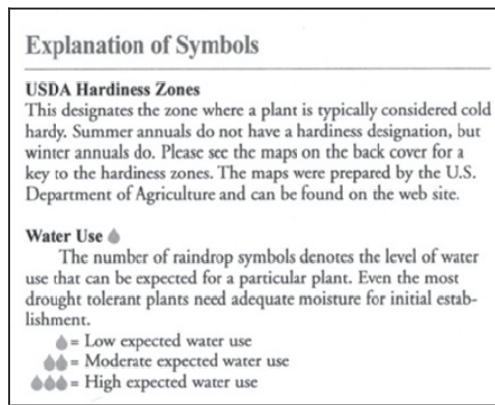

Explanation of Symbols

USDA Hardiness Zones
This designates the zone where a plant is typically considered cold hardy. Summer annuals do not have a hardiness designation, but winter annuals do. Please see the maps on the back cover for a key to the hardiness zones. The maps were prepared by the U.S. Department of Agriculture and can be found on the web site.

Water Use 💧
The number of raindrop symbols denotes the level of water use that can be expected for a particular plant. Even the most drought tolerant plants need adequate moisture for initial establishment.

💧 = Low expected water use
💧💧 = Moderate expected water use
💧💧💧 = High expected water use

Fig. 6. Example of the use of the water droplet symbols to denote water use in the plant selection.

dwindling water resources for Texas landscapes, however, we are now categorizing Texas Superstar® plants by their water requirements. In the brochure, water droplet symbols are used to denote plant water use for each of the plant selections (**Fig. 6**). This allows us to put an emphasis on choosing the most drought tolerant plants for use in arid environments by both producers and consumers, with the ultimate goal of maintaining functional landscapes with limited water requirements.

3. Results and Discussion

The Texas Superstar® brochures are being distributed at trade shows and other industry events, in retail settings, and at consumer education conferences around the state. Efforts are being made to increase awareness of the Texas Superstar® program through presentations to diverse audience types including industry, general consumers, Master Gardeners, etc. A webinar presentation was made in July 2013 to a largely industry audience which allowed an opportunity to measure the impact of the Texas Superstar® program. The 66 participants were asked to complete a questionnaire to gauge the perceived gains in knowledge and economic benefit as a result of the information provided through the webinar in conjunction with the existing Texas Superstar® online and printed materials. The results are summarized below:

The total number of attendees was 66 with a level of satisfaction of 4.47 out of 5. Knowledge of the Texas Superstar® program before the webinar was rated 3.3 and was rated 4.43 after the webinar for an increase in knowledge of 34%. The increase in profits that were anticipated as a result of the knowledge gained from participating in the webinar was estimated by the attendees to be $658,730. After the webinar,

there were an additional 101 views of the recording with an estimated economic benefit of $1,008,056 using the knowledge gained from the webinar. Thus, the total economic benefit anticipated by the participants was $1,666,786.

4. Conclusion

The total estimated increase in economic benefits of over $1.6 million due to the increase in knowledge through the Texas Superstar® program indicates the value that persons knowledgeable of the program put on its implementation and use. The use of the brochure as an educational tool should help raise awareness of this important program to the industry and consumers in our region promoting the use of well-adapted plants for use in arid environments with the ultimate goal of maintaining functional landscapes with limited water requirements.

References

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