

Landscape managers digging into new growing medium

by James E. Guyette

■ Landscape managers in Texas are digging into a new highly efficient planting medium that is cheaper than peat moss. "It's never been done before, but it's an excellent product and it's very economical," reports Gary Kinney of Kinney Bonded Warehouse, a horticultural supply firm in Donna, Texas.

"The local landscape trade here is using it and I've sold all of our crop potential so far," says Kinney. The material comes from kenaf, a tall, leafy, fibrous plant closely related to the hibiscus. Until now kenaf (pronounced "kuh-NAFF") has been used mainly for cattle feed, rope and newsprint.

It holds high hopes for the landscape industry, according to Kinney and Dr. Yin Tung Wang, a horticultural scientist at the Texas Agricultural Experiment Station in Westlaco.

Previously the core of the kenaf plant was usually discarded, "but we researched it as a potting medium and it worked," says Kinney.

"The whole idea," Wang explains, "was to reduce production costs by using kenaf in the potting medium instead of peat moss, which is expensive and must be shipped in from Canada.

"But our research showed that to keep the desired properties of the mix, we still had to blend in some peat moss. So the challenge was to determine the maximum proportion of kenaf, while at the same time providing a healthy growing medium for plants."

After almost three years of research, that proper proportion turned out to be an approximate mixture of 70 percent kenaf and 30 percent peat moss.

"There are a few other minor ingredients in there such as wetting agents and time-released fertilizers, but that 70/30 mixture works quite well and keeps cost low," according to Wang. The bulk kenaf product sells for \$14.50 per cubic yard;



The kenaf processing plant is able to reproduce any type mix that anybody in the landscaping business might ever want to order.

peat moss is \$21 to \$25 per cubic yard.

Harvesting of the first-ever landscape-oriented kenaf crop began last fall on a 750-acre spread. It soon sold out and more is being planted.

This year's kenaf harvest will produce some 20,000 to 22,000 cubic yards of material for use as a planting medium, but Kinney anticipates needing more than 100,000 cubic yards at full production to meet the demand.

It is being processed at the new Kenaf International Plant north of Weslaco, and Kinney plans to construct a building adjacent to Kenaf International this spring to house a \$150,000 mixing facility. "With that mixing equipment, we'll be able to reproduce any type mix anybody in the (landscaping) business would want," Kinney says.

Kenaf originated in Africa and was brought to the Rio Grande Valley in the 1920s and '30s. In a few months, kenaf grows from a small seed to a 15-foot-tall plant. If harvested early, the leaves can be used as cattle feed. But in the Rio Grande Valley, the kenaf industry uses kenaf stems—not leaves—so the plant is allowed to grow to maturity. The kenaf bark, known as bast, is high in fiber. It is stripped, compressed, baled and sent to a

paper mill in North Carolina, where is used to make high-quality newsprint. Once the bark is stripped and shipped, the stem core is then ground into fine particles that are mixed with peat moss and other materials to form the growing medium.

Kenaf byproducts are also used for wallboard and the dashboards of automobiles, and research is being conducted on the material for large-scale vegetable production. Currently landscape contractors and nursery applications are the biggest agricultural users.

"The future looks very bright," says Kinney. "If you look at it it takes some imagination, but as a growing medium it's working quite well."

For more information:

● K-Mix, 102 N. 13th St., Donna, Texas 78537; (210) 464-4491

● Kenaf International, 120 E. Jay Ave., McAllen, Texas 78504; (210) 687-2619

● Weslaco Texas A&M Ag. Experiment Station, Dr. Yin Tung Wang, Dept. of Hort., 2415 E. Highway 83, Weslaco, Texas 78596; (210) 968-5585

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