

# Plant Fact Sheet

## TANGLEHEAD

### (*Heteropogon contortus*)

Kika de la Garza PMC  
Kingsville, Texas

October 1999

#### INTRODUCTION

Tanglehead (*Heteropogon contortus*), is a native, warm-season, perennial bunchgrass. Also known as spear grass, it is a member of the *Andropogoneae* tribe of grasses. Tanglehead can grow three to eight feet in height, although most plants in south Texas do not grow much taller than three feet.

Tanglehead has a unique and interesting seedhead with long, twisted dark-colored awns (Hatch, Schuster, & Drawe, 1999). In Texas, it can flower from March to December, although the main flowering period is from June to November (Gould, 1975). Hitchcock (1971) notes that the spikelets of this genus come in pairs: one sessile and one pedicellate. The genus name *Heteropogon* refers to this as it means 'different beard' in Greek. . The species is mostly apomictic (Emery & Brown, 1958), but sexual reproduction has also been known to occur (Tothill, 1968).

#### ADAPTED AREA

Tanglehead has a worldwide distribution (Hitchcock, 1971). It can be found on every major land mass between 35° N. Latitude and 35° S. latitude and is one of a very few grasses that is said to be native to both the Old World and New World tropics (Emery & Brown, 1958).

In the United State, it is present in the southern parts of Texas, New Mexico, Arizona (Gould, 1985), and in Hawaii (Hitchcock, 1971). In Texas, it is found in sandy prairies in extreme south Texas and in the Trans-Pecos mountains (Correll & Johnston, 1996). In the coastal regions of Texas, tanglehead persists mostly in well-managed pastures, although it was once a common grass in the coastal prairies (Hatch, Schuster, & Drawe, 1999).



It should be noted that Tanglehead has a high degree of adaptability that has allowed it to survive in locations around the world for many years. Therefore plants from different global locations may differ in a wide range of morphological and phenological characteristics (Tothill, 1968).

#### USES

Tanglehead is a good forage grass for the southwestern United States, and does not develop the sharp awns if it is consistently grazed. If allowed to form, these sharp awns can cause injury to sheep and other animals. Tanglehead is palatable to most livestock during the growing season. As it matures, it becomes coarser, and loses palatability (Gay, Dwyer, Allison, Hatch, & Schickendanz, 1980). Tanglehead forage stands should be carefully managed, as populations will decrease under heavy grazing (Hatch, Schuster, & Drawe, 1999).

Tanglehead is also used in Hawaii, where it is called pili. It is considered an important forage grass, and has been used by Hawaiian natives to thatch huts (Hitchcock, 1971). In addition, tanglehead can provide good nesting cover for birds, and good fawning cover for deer (Hatch, Schuster, & Drawe, 1999). Tanglehead's interesting looking seedhead makes it a good candidate for

ornamental use. It can also be used as a grass for native habitat restoration projects.

### ESTABLISHMENT

Tanglehead can be reproduced from seeds or vegetative transplants. A stand of tanglehead was established at the Kika de la Garza Plant Materials Center using vegetative bunches split off of original plants at collection sites throughout Texas. Tanglehead plants at the PMC have also been grown from seed, although germination was found to be less than ten percent using conventional germination techniques without scarification (Kika de la Garza PMC, 1999).

### MANAGEMENT

Tanglehead plants at the Plant Materials Center were shredded or burned on an annual basis to reduce dead plant matter and induce new growth. Burning is commonly used as a tool to maintain tanglehead pastures for grazing in other parts of the world. However, some of the south Texas accessions were very sensitive to burning, being slow to regrow. Therefore, ample time should be given between burning and grazing periods.

It is recommended that a minimum six inch stubble height be maintained under continuous grazing. For rotational grazing, forage height should be utilized between four to ten inches.

### PRODUCTION

Mechanical harvesting of tanglehead was found to be impractical, as the seed heads tend to ball up during combining. Similar problems occur with a brush harvester, as the seed heads tend to catch in the brushes. In addition, seed cleaning was difficult as the large awns are not easy to remove without damaging the seeds. However, without the removal of the awns, mechanical planting would not be practical as they would clog the planter. This limits tanglehead's applications in south Texas to small acreage and ornamental uses.

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## REFERENCES

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### WHERE TO GET HELP

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."