

## TANGLEHEAD

*Heteropogon contortus* (L.)

Beauv. Ex Roemer

& J.A. Schultes

Plant symbol = HECO10

Contributed by: USDA NRCS Kika de la Garza Plant Materials Center

### Alternate Names

spear grass



### Uses

**Livestock:** Tanglehead (*Heteropogon contortus*) is a good forage grass for the southwestern United States, and does not develop 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. Tanglehead forage stands should be carefully managed, as populations will decrease under heavy grazing.

**Wildlife:** In addition, tanglehead can provide good nesting cover for birds, and good fawning cover for deer. It can also be used as a grass for native habitat restoration projects.

**Ethnobotanic:** Tanglehead is also used in Hawaii, where it is called pili. It is considered an important forage grass, and has been used by Hawaiin natives to thatch huts.

**Ornamental:** Tanglehead's interesting looking seedhead makes it a good candidate for ornamental use.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

### Description

Tanglehead 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. In Texas, it can flower from March to December, although the main flowering period is from June to November. The genus name *Heteropogon* refers to the spikelets of this genus that come in pairs as it means 'different beard' in Greek. The species is mostly apomictic (producing seed without pollination), but sexual reproduction has also been known to occur.

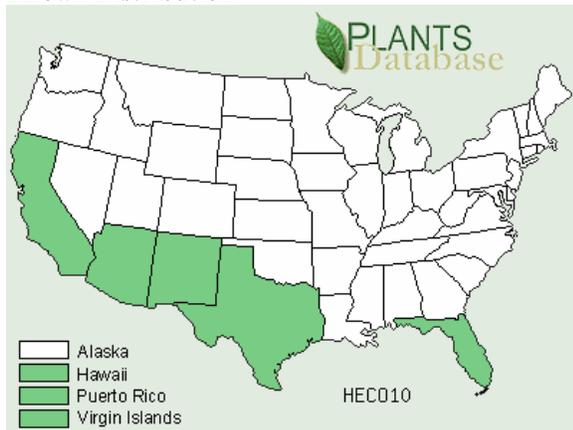
### Adaptation

Tanglehead has a worldwide distribution. It can be found on every major landmass between 35° N latitude and 35° S latitude. It is one of a very few grasses that is said to be native to both the Old World and New World tropics.

In the United State, it is present in the southern parts of Texas, New Mexico, Arizona, and in Hawaii. In Texas, it is found in sandy prairies in extreme south Texas and in the Trans-Pecos Mountains. In the coastal regions of Texas, tanglehead persists mostly in well-managed pastures, although it was once a common grass in the coastal prairies.

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.

## Known Distribution



## 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 from 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.

## 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.

## Pests and Potential Problems

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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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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