

2. Importance of Brachiaria grass

Brachiaria grass is one of the important tropical forages found in Africa. There are about 100 species of Brachiaria grass of which seven perennial species have been used for pasture improvement. Brachiaria grass has several attributes of agricultural and environmental significance. Some of key attributes of Brachiaria grass are as follows:

A. Production and adaptability:

- High biomass production potential (30 t of dry matter/ha per year).
- Drought, flood and shade tolerance.
- Adapted to low fertility and acidic soils.

B. Benefits to livestock:

- Palatable and nutritious to livestock.
- Improves livestock health and performance (milk and meat production)

C. Environmental and ecological benefits:

- Fixes atmospheric carbon-dioxide into soils, improves soil health and reduces greenhouse gas emission (especially methane and nitrous oxide)
- Minimizes nitrogen loss from soils.
- Protects soils from erosion.
- Support wildlife

D. Social economic benefits:

- Potential for new agri-business e.g. sale of hay, silage, feedblocks, seeds and vegetative planting materials (splints/rooted tillers).
- Improves income and livelihood of livestock farmers

Evaluations carried out in tropical Africa have shown a broad adaptation of *B. brizantha*, *B. decumbens*, *B. mutica* and *B. ruziziensis* in different agro-ecological zones. Moreover, various cultivars of *B. brizantha*, *B. decumbens*, and hybrids derived from crosses of *B. brizantha* × *B. decumbens* × *B. ruziziensis* have been evaluated in Africa for adaptation, biomass production and for livestock productivity. Details on the Bracharia cultivars suitable for forage production in Africa are provided in the subsequent section.