Common Forages

Most of the plant materials eaten by ruminants in Jamaica are not indigenous to the island; however, some have been in use for over 50 years. Forages commonly used to feed livestock include:

- Grasses
- Legume
- Shrubs
- Conserved Fodder

Grasses

Brachiaria Humidicola

A new cultivar of this grass was recently introduced and is being evaluated at Bodles Research Station. Brachiaria Humidicola is a species of the Brachiaria genus, which is a native of Central and Eastern Africa.The popular Brachiaria grass in Jamaica is Brachiaria decumbens (Signal grass), which is a stoloniferous variety. Brachiaria Humidicola is similar in growth habit, prefers shallow soils and rocky terrain, but is more tufted. It also appears to have a higher leaf-to-stem ratio than Signal grass.

Cynodon (Tifton 85)

Cynodon sp. (Tifton 85) is being evaluated at Bodles Research Station. The Cynodon species has several cultivars of Bermuda grass developed in the United States and Tifton 85 is one example. This grass is the F1 hybrid between Cynodon (Plant Introduction Number 290884) from South African and Tifton 86.Tifton 86 has longer stems, broader leaves and a darker green colour than most of the other Bermuda grass hybrids. This grass is suited for grazing and hay making.

Digitaria decumbens (Pangola)

This grass is one species of the genus Digitaria, of which there are more than 300 varieties. Pangola is a vigorous, strongly stoloniferous perennial grass, and propagation is by stolon cuttings.This grass is well accepted by animals and maintains it nutritive value when adequately grassed.

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Digitaria melanjiana (Jarra)

Jarra grass is another Digitaria variety being cultivated at Bodles. It is similar to Pangola but appears to show much more vigorous growth. Jarra produces viable seeds which is a major advantage in its establishment.Jarra grass could be of value to the livestock industry because as reports suggests this grass is very good for haymaking and produces estimated yields of 12 metric tons/ha/cwt.

Grasses

Pennisetum purpureum (hybrid Napier N69)

The Pennisetum genus contains annuals and perennials, tufted or creeping varieties with branched stems. Pennisetum purpureum is an important pasture species; and hybrid Napier N69 is similar to Napier grass, but has a higher leaf-to-stem ratio than Napier. Annual dry matter yield of 16.6 tons/ha at 6 weekly cutting interval and 130 kg/ha/an of Nitrogen was recorded for hybrid Napier N69.

Panicum maximum (Guinea Grass)

This 2m tall grass of the Poaceae family is native to Africa. Its adaptability to tropical climate, drought-like conditions and a variety of soil types makes it suitable fodder for farm animals locally. Guinea grass leaves are fine, soft and contain good levels of protein (13-21%). The root system of Guinea grass allows it to survive fires. Additionally, it is shade-tolerant and can be intercropped with taller plants. It seeds profusely ensuring a constantly regenerating fodder supply.

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Pennisetum purpureum (Mott Dwarf Elephant Grass)

While being a short grass as the name suggests, Mott Dwarf Elephant Grass can grow to an uncut height of 1 metre. Although the yield is usually less than Napier grass, the Mott dwarf has a higher leaf-to-stem ratio. Its most outstanding characteristic is its high forage quality.

Legumes

Leuceaena leucocephala (Wild Tamarind)

Leuceaena leucocephala is a deep-rooted perennial shrub native to Central and South America. The plant is suited to well-drained neutral to alkaline soils, and is also drought resistant. Ruminants may graze on wild tamarind, or it may be harvested for feeding.It is propagated by seeds or cutting.

No Photo Available

Gliridia sepium (Quickstick)

Gliridia sepium is a fast-growing tree that reaches up to 20 metres in height. Useful as live fence post, Quickstick is a good source of protein and can be propagated by seeds or cutting. The species is also known to improve animal production (both milk and meat) in large and small ruminants.

Shrubs

Centrosema pubescens

This leafy, climbing perennial herb was introduced from Latin American. At maturity Centrosema may reach a height of 40-45 cm. It grows well in a variety of soil types from loamy to clay, and does not require fertilizers. The deep rooted shrub is able to withstand excessive dry periods. However, seedling growth is slow, and it needs light grazing for the first six months to eliminate other plants overrunning the herb.Centrosema makes good hay, but may require mixture with other forages such as Panicum maximum (Guinea grass) to reduce leave shattering.

Morus alba (Mulberry)

Mulberry is a shrub that has traditionally been used for feeding the silk worm in some parts of the world. It is also grown for its fruit, which is used for the production of juices and preserves.

Trichanthera gigantea

A tree of South American origin, Trichanthera adapts to a wide range of tropical ecosystems. It is established by cuttings.Reports suggest that Trichanthera has been used to feed sheep, goats, and pigs, and is also incorporated in feed for poultry. Leaves are highly digestible and protein content ranges between 17 and 22%.

Conserved Fodder

Hay

Activities in livestock production should involve fodder conservation. Animals need to be fed throughout the year and hay is particularly useful during periods of drought and whenever grass growth is poor. The basic steps for hay making involve harvesting good quality forage. The forage should be allowed to dry in the field, and then stored in bales.

Silage

Forages can be preserved by fermentation process using acids and/or a source of soluble carbohydrates such as molasses. Simple steps in making silage involve harvesting good quality grass by cutting into small portions, then compacting while adding acids or molasses when the material is placed into a silo. Pitfalls to avoid in making good quality silages are exposing the plant material to excess moisture, air and soil. This conserved material will remain for years without any deterioration in quality.