Scientific Name:
*Gliricidia sepium*

Family:
*Leguminosae*

Common Names:
Gliricia, Quick-stick,
Tree of iron [English]

**Plant Description**

*Gliricidia* is one of the major tropical forage trees due to its high nutritive value, fast growing capacity and its ability to adapt to a variety of conditions. It is a perennial, medium-sized (1 to 15 m high) legume tree. Imparipinnate; leaflets are ovate, 2-7 cm long x 1-3 cm broad.

**Bark:** Whitish grey to deep red-brown and smooth.

**Flowers:** Bright pink to lilac, tinged with white, with a diffused pale yellow spot at the base of the petal.

**Pods & Seeds:** The pods are 10-18 cm long and 2 cm broad, that contain 8 to 10 seeds.

**Propagation and Cultivation**

Cultivation of *Gliricidia* can be done by using seeds or cuttings.

**Sowing:** Select seeds from mature dried pods, seeds can be sown directly or in containers.

**Cuttings:** Should be 30-60 cm long with brownish-green bark and cut at a 45-degree angle at both ends. This is the preferred and recommended method as germination rate is very high given one of its common names – quick stick

**Transplanting:** Seeds and cuttings can be transplanted 50-100 cm apart; row width will vary depending on the height plants are to be maintained at applied pre-planting and biannually.

**Livestock Feeding Value:**

*Gliricidia* can yield normally between 9 to 16 tonnes per hectare on a Dry Matter (DM) basis in well managed cut and carry systems, it is not susceptible to many pests and grow well in poor soils. Branches can be harvested around 7 months after establishment of plants grown from cuttings and 14 months after seedling establishment. Harvesting can occur every 2 to 3 months during the rainy season and
**Nutrient content Gliricidia leaves, fresh**

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Unit</th>
<th>Avg</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry matter</td>
<td>% as fed</td>
<td>25.3</td>
<td>19.6</td>
<td>37.0</td>
</tr>
<tr>
<td>Crude protein</td>
<td>% DM</td>
<td>22.3</td>
<td>15.4</td>
<td>28.8</td>
</tr>
<tr>
<td>Crude fibre</td>
<td>% DM</td>
<td>19.7</td>
<td>14.4</td>
<td>28.4</td>
</tr>
<tr>
<td>Ether extract</td>
<td>% DM</td>
<td>4.2</td>
<td>3.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Ash</td>
<td>% DM</td>
<td>10.0</td>
<td>6.7</td>
<td>13.7</td>
</tr>
<tr>
<td>Gross energy</td>
<td>MJ/kg DM</td>
<td>19.7</td>
<td>17.5</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Table taken from http://www.feedipedia.org/node/11617

**Feeding Gliricidia to Small Ruminants**

Gliricidia is an excellent source of protein, but due to its high tannin content it is recommended that it should comprise no more than 20% of the animal’s daily feed intake. Wilting of the leaves is recommended to improve storage, increase dry matter intake and reduce potential toxicity. (Heuzé et al. 2015)

- A normal standard for feeding small ruminants is to feed at 4% of the body weight of the animal on a dry matter basis example:
- According to the table above the average dry matter of Gliricidia is 25.3% that is, 100 lb fresh Gliricidia contains approximately 25.3 lb dry matter and 74.7 lb of water.
- A 100 lb animal would therefore require 4 lb DM and as previously recommended Gliricidia should comprise 20% of the daily intake therefore 20% of 4 lbs is 0.8 lb DM.
- To provide 0.8 lb DM of Gliricidia one would be required to feed 100/25.3*0.8= 3.16 lb fresh weight Gliricidia.

Mature animals should be fed 2.5% body weight on a dry matter basis

**References**