

## Accession No. 209

IC No.:

Scientific Name: *Terminalia arjuna*

Common Name: Arjun

Place of origin: Silke, Ranchi, Jharkhand

Date of plantation: June-2002



### Anatomy and physiology

| #  | Parameter                   |                  | #  | Parameter                      |         |
|----|-----------------------------|------------------|----|--------------------------------|---------|
| 1  | Plant Nature                | Erect            | 25 | Moisture (%)                   | 65.87   |
| 2  | Bark Nature                 | Rough            | 26 | MRC (%)                        | 62.13   |
| 3  | Bark Colour                 | Brown            | 27 | Stomata /mm <sup>2</sup>       | 424.48  |
| 4  | Phyllotaxy                  | Opposite         | 28 | Stomata length (μm)            | 31.3    |
| 5  | Leaf Nature                 | Homophyllous     | 29 | Stomata width (μm)             | 19.48   |
| 6  | Leaf Shape                  | Ovate            | 30 | Stomata pore length (μm)       | 15.337  |
| 7  | Leaf Apex                   | Mucronate        | 31 | Stomata pore width (μm)        | 5.943   |
| 8  | Leaf Margin                 | Repand           | 32 | Cuticle thickness(μm)          | 12.75   |
| 9  | Young Leaf Colour           | Light Copper Red | 33 | Upper epidermis thickness (μm) | 12.817  |
| 10 | Young Leaf midrib Colour    | Green            | 34 | Palisade thickness (μm)        | 164.627 |
| 11 | Mature Leaf colour          | Pale Green       | 35 | Parenchyma thickness (μm)      | 164.607 |
| 12 | Young Leaf Pubescence       | Dense            | 36 | Lower epidermis thickness (μm) | 12.63   |
| 13 | Number of Glands            | 2                | 37 | No. of chloroplasts            | 6.333   |
| 14 | Position of Glands          | Alternate        | 38 | Total thickness(μm)            | 367.543 |
| 15 | Leaf Length (cm)            | 10.567           | 39 | Palisade: Parenchyma           | 1       |
| 16 | Leaf Width (cm)             | 5.2              | 40 | Chlorophyll a (mg/g)           | 0.88    |
| 17 | Petiole Length (cm)         | 0.417            | 41 | Chlorophyll b (mg/g)           | 0.863   |
| 18 | Leaf Length: petiole length | 25.36            | 42 | Chlorophyll a/b                | 1.025   |
| 19 | Leaf Weight                 | 5.39             | 43 | total Chlorophyll (mg/g)       | 1.68    |
| 20 | Petiole Weight              | 0.055            | 44 | Phenol (μg/mg)                 | 0.763   |
| 21 | Leaf weight: Petiole Weight | 98.939           | 45 | Reducing sugar (μg/mg)         | 9       |
| 22 | Lamina weight (gm)          | 5.335            | 46 | Non-reducing sugar (μg/mg)     | 7.2     |
| 23 | Laminar Index (%)           | 98.981           | 47 | Proline (μg/g)                 | 48.867  |
| 24 | Internodal Distance(cm)     | 2.083            | 48 | Protein (mg/g)                 | 14.367  |