

Table 8. List of descriptors for Sweet Sorghum

| S.No. | Traits | Recording stage | Descriptor state | Procedure | Remarks |
|--------------|--------------------------|------------------------|-------------------------|--|-----------------------|
| 1 | Stem thickness (cm) | After harvesting | Exact width | Measure girth of the main stalk with the help of digital caliper after harvesting. Take mean of five randomly selected plants. Should be measured at the points 25 cm above base of the stalk; 25 cm below the topmost node and from centre of the stalk and averaged. | New descriptor |
| 2 | Number of internodes | After harvesting | Exact number | Of the main stalk after harvesting. Mean of five representative plants. | New descriptor |
| 3 | Grain yield (kg/ha) | At maturity | Exact yield | Record grain yield from harvested area and calculate yield kg per hectare. | New descriptor |
| 4 | Fresh stalk yield (t/ha) | At maturity | Exact yield | Record fresh stalk yield with leaves from harvested area and calculate yield tons per hectare. | New descriptor |
| 5 | Fresh cane yield (t/ha) | At maturity | Exact yield | Fresh stalk yield after leaf striping from harvested area and calculate yield tons per hectare. | New descriptor |
| 6 | Juice yield (l/ha) | At maturity | Exact yield | Juice is extracted from the stalk using electrically operated juice extractor and yield is measured in litres per hectare. | New descriptor |
| 7 | Juice extraction % | Post harvest | | Calculated as: $[\text{Juice yield (t ha}^{-1}) / \text{Cane yield (t ha}^{-1})] * 100$ | New descriptor |

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|----|--|--------------|--|---|-----------------------|
| 8 | Total soluble solids (TSS %)/ Brix (%) | At maturity | | Total solids content present in the juice expressed in percentage. Brix includes sugars as well as non-sugars. Brix can be measured in the field itself in the standing cane crop using a Hand Refractometer. In the field, cut the stem, press to get juice and place a drop of the juice sample in the Hand Refractometer and measure the Brix reading. The HR Brix readings should be separately taken from top, middle, and bottom and work out average. It is also preferred to cut the stem at 5 th internode and pressed to collect juice sample. Record observation on five representative plants. | New descriptor |
| 9 | Sucrose per cent or pol per cent | Post harvest | | The juice sucrose per cent is the actual cane sugar present in the juice. It is determined by using a polarimeter, hence sucrose per cent is also referred to as pol per cent. For all practical purposes, pol % and sucrose % are synonyms. Sucrose % in juice can also be measured by using sucrolyser/Saccharimeter. | New descriptor |
| 10 | Purity coefficient | Post harvest | | It refers to the percentage of sucrose present in the total solids content in the juice. A higher purity indicates the presence of higher sucrose content out of the total solids present in juice. Purity Percentage = (Sucrose %/HR Brix) * 100 | New descriptor |
| 11 | Bagasse yield (t ha ⁻¹) | Post harvest | | It is the weight of leftover canes after juice extraction estimated in t ha ⁻¹ . | New descriptor |