

Proper Utilisation of Cane Material for Maximising Sugar Production*

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Cane stalks are primarily used for milling for sugar or gur and preparing cuttings for planting. For maximising production of cane and sugar, appropriate use of cane material is essential. The top portions of canes (especially unarrowed canes) are less mature than the remaining parts and contain less sucrose. But these germinate best and give a good stand of the crop and facilitate realisation of high cane yields. The effect of removal of one three budded sett from top of canes as prepared for milling at present on juice quality was studied from January to April in Co. 527 and Co. 419. Removal of a sett instead of a particular length was adopted so that the cutting can be directly used for planting without further manipulation. By planting such top setts $\frac{1}{2}$ to $\frac{2}{3}$ the weight of cane material now being used for planting could be saved. This would also mean, burying underground less sugar, than when stalk cuttings are planted. The improvement in sucrose content of juices due to removal of top setts was marked in the earlier months when canes were less mature. Similar was the case with recoverable sugar also. Results were consistent in the case of Co. 419 and indicated that when canes were at peak maturity improvement in sucrose or recoverable sugar by the removal of top setts was least. However, there was significant increase in calculated C. C. S. percent in all the months. Even this increase was negligible when canes were at their peak maturity indicating that canes can be fed to mills as they are prepared at present. Results from Co. 527 were not so consistent though there was significant improvement in calculated C. C. S. percent in all the months in the case of this variety also.

The Farmers should not harvest cane stalks and feed them to mills or use them for planting as they are. In the interest of maximisation of production the canes should be properly dressed after harvest. It is desirable to remove one three budded sett each from the tops of canes and utilise the same for planting. The remaining stalks are best used for manufacture of jaggery or sugar. This will mean proper utilisation of cane material and results in increased cane and sugar yields.

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