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Qualitative Analysis of Macronutrients from Musa spp. Pseudostem watery sap

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Abstract: Banana (Family Musaceae), one of the largest herbs in the worlds, is the fourth most important global food crop (INIBAP 2001). Banana pseudostem expands rapidly each day and the overlapping, close fitting leaf sheaths contain a series of longitudinal canals of large lacunae filled with air (Skutch 1927, Aubert 1973). Banana pseudostems are crop waste, which cause economic loss and environmental issues after harvest. However pseudostems are rich in dietary fibre and have health benefits. This study explored the chemical composition of Pseudostem watery sap (Carbohydrates, Protein, Amino acids) and anatomy of the pseudostem. The pseudostem is used as a dietary product for fibre source. The watery sap which is the main constituent of pseudostem was experimented with the nutritional content in it. The intension of doing the same was to conclude that not only the fibres but the sap is also nutritionally beneficial.

The watery sap was extracted from a live grown up plant by inserting a plastic straw in the pseudo stem with about 2-3cm deep and collecting the sap in the plastic bottle. The sap was tested before browning. The untreated sap showed the presence of macronutrients with the chemical test. The qualitative test showed the presence of the nutrients in the watery sap.

Thus the sap can also be considered as nutritionally beneficial as the pseudostem. The juice extracted of the pseudostem by crushing it is also medicinally important. But here in the present study watery untreated sap was taken into consideration.

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