DEVELOPMENT STRUCTURE AND PROFILE OF TUBERS AMYLUM AS THE BASIS OF CARBOHYDRATE SOURCE DIVERSIFICATION

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ABSTRACT

Tubers are a modification of certain plant organs that function to store food reserves, which are generally carbohydrates (starch / flour). The morphological structure of these tubers has various shapes, some are round, long cylindrical, can be clearly segmented or there are no segments visible, some are small and some are even very large. This difference is of course related to differences in the development of the network that makes up these tubers. The swollen tuber structure is bigger than the original organ, of course it cannot be separated from the activity of the meristematic tissue which is different in activity from the organ of origin. The purpose of this study was to describe the structural development of several types of tubers and to describe the differences in the structural development of several types of tubers that store carbohydrate stores. Samples of several types of tubers were taken at various stages of development, then made fresh preparations and preserved preparations crosswise and longitudinally. The preparation of fresh preparations using the free hand section or cut by freeze drying microtome. Making preserved preparations using the paraffin embedding method. The data that has been collected is analyzed descriptively and then presented in the form of narration, tabulation and pictures or photos. Keywords: Development, Tubers, Starch, carbohydrate reserves.

Kata Kunci: Tuber, amylum, Carbohydrate