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Research Article

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**COMPARATIVE STUDY BETWEEN CULTIVATED GARLIC  
(*ALLIUM SATIVUM*) AND WILD GARLIC (*ALLIUM  
TUBEROSUM*)**

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**ABSTRACT**

Cultivated garlic (*A.sativum*) was collected from local market which was procured from Mathania region of Rajasthan. Wild garlic (*A.tuberosum*) was procured from CAZRI, Jodhpur. *A. sativum* (LMC/PW/N-S1) and *A.tuberosum* (LMC/PW/N-T2) were authenticated by Botanical Survey of India, Jodhpur. Morphological studies were carried out on living and as well as herbarium materials. 25 individuals of each species and their 25 characters were studied and measured so as to determine their morphological characteristics using a LabTech 40x microscope. Minimum and maximum ranges of measured characters are presented. Anatomical studies were carried out on specimens kept in 70% alcohol. The paraffin method was used for the transverse sections of the root, the stem, the leaf and the petiole, and surface sections of leaves. The specimens were embedded in paraffin and then sectioned. All sections were stained with safranin and fast green and then mounted in Canada balsam. Measurements and photographs were taken using a Lab Tech binocular light microscope and a Panasonic Lumix camera. *A.tuberosum* do not contain high amount of allicin when compared with *A.sativum*. Hence it cannot replace cultivated garlic (*A.sativum*) for those activities which are due to allicin and its degraded compound. Wild garlic (*A.tuberosum*) need to be studied as a standalone drug instead of comparison with cultivated garlic.

**Key words:** Wild garlic, Anatomical studies, Morphological, Allicin, Cultivated garlic.