

**PERFORMANCES ON GROWTH AND RHIZOME SIZES OF
TURMERIC (*CURCUMA LONGA* L.) VARIETIES, GROWN UNDER
CONVENTIONAL AND ORGANIC NUTRIENT MANAGEMENT PRACTICES
UNDER TERAJ REGION OF WEST BENGAL**

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ABSTRACT

Eleven improved varieties of turmeric (Megha Turmeric (V₁), Alleppy Supreme (V₂), IISR Kedaram (V₃), IISR Pratibha (V₄), BSR-2 (V₅), Suranjana (V₆), Rajendra Sonia (V₇), Roma (V₈), Rashmi (V₉), Duggirala Red (V₁₀) and Narendra Haldi-1 (V₁₁)) were examined in a field experiment during rainy season, 2012-13 (Season May-March) to study the comparative effect between conventional nutrient management practices (P₁- inorganic N:P:K @ 120:60:60 kg/ha (RDF) + FYM @15 tonnes/ha) and organic nutrient management practices (P₂- FYM @ 15 tonnes/ha and vermicompost @ 7.5 tonnes/ha + Azophos @5 kg/ha) for the growth characters, finger physique etc. The study was carried out at Organic vegetable Production Field of Uttar Banga Krishi Viswavidyalaya with 2-factor statistical randomized block design. The treatment P₁ over P₂ and the individual varietal performances significantly differed from each other for all growth characters like plant height, number of tillers per plant, number of leaves per plant, leaf length and leaf width and finger size attributes like mother and primary rhizome length and perimeter. The interactions between varietal performance and the production system for the growth and finger size characters also differed significantly except leaf width, mother rhizome length and primary rhizome perimeter.

KEYWORDS: Organic, Nutrient Management, Turmeric Fingers, Growth, Size

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