



Influence of micronutrients on flowering, yield, quality and leaf nutrient status of coconut cv. HYBRID DXT

N.G. NISTANE, B.V. PADHIAR, P.P. BHALERAO AND R.R. BHALERAO

See end of the article for authors' affiliations

Correspondence to:

B.V. PADHIAR

Department of Fruit Science, ASPEE College of Horticulture and Forestry, Navsari Agricultural University, NAVSARI (GUJARAT) INDIA

ABSTRACT

The experiment was conducted on influence of micronutrients on flowering, yield, quality and leaf nutrient status of coconut cv. HYBRID DXT at Regional Horticultural Research Station, Navsari Agricultural University, Navsari during the year 2007-2008. Foliar spray of FeSO_4 1% + ZnSO_4 1% + Borax 0.5% not only enhanced the flowering but also gave quality nuts with maximum leaf nutrient status. While, length of nut and diameter of nut before and after dehusking were not affected by the different treatments of micronutrients.

Nistane, N.G., Padhiar, B.V., Bhalerao, P.P. and Bhalerao, R.R. (2011). Influence of micronutrients on flowering, yield, quality and leaf nutrient status of coconut cv. HYBRID DXT, *Asian J. Hort.*, 6 (1) : 89-91.

Key words : Flowering, Coconut hybrid, Micronutrient, Yield, Quality, Leaf nutrient status.

Coconut (*Cocos nucifera* L.) is one of the important commercial plantation crops of the peninsular India. It is a native of South East Asia and belongs to the family Palmaceae. Considering the large scale use of the coconut tree, it is well known as "Kalpavriksha". It has primitive place in the socio-economic life of rural people of India. 'West Coast Tall' is one of the important coconut cultivars covers more than 90% area in Gujarat, and also in the coastal belt of Western India.

Similarly, Dwarf Green (Bona) is also grown in Saurashtra region of Gujarat. The average yield of coconut in various regions has been assigned for the low productivity of this crop, of which deficiency of nutrients is considered the appropriate reason. In bearing coconut palms, application of macro nutrients has been recommended based on local agro-climatic conditions and soil types. While research on micronutrients studies has been found unraveled. A vital role of micronutrients has been studied well for growth, yield and quality in large number of horticultural crops. However, the literature on this aspect is very meager. In Gujarat, this type of study was not carried out during the last couple of years. With the development and acceptance of hybrid coconuts (DxT or TxD) by the farmers of South Gujarat, the experiment was conducted to study the effect of micronutrient spray

on flowering, yield and quality and leaf nutrient status of coconut cv. HYBRID DXT.

MATERIALS AND METHODS

The present experiment was carried out in coconut orchard planted at 10m X 10m in 1996-97 at Regional Horticultural Research Station, ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari, during the year 2007-08, under Randomized Block Design (RBD) with twelve treatments either alone or in combination of Fe (Iron) (1% and 2%), Zn (Zinc) (1% and 2%), boron (0.5% and 1%) and water spray including control with three replications. Almost healthy and uniformly growing trees were selected from the orchard for the study. The treatments of micronutrients spray on plants were applied twice at an interval of one month *i.e.* first day of January and March, 2007-08. For chemical analysis, the fruits were harvested treatment wise by hand picking at tender stage *i.e.* seven months after flowering and at the mature stage *i.e.* three months after tender stage when dark green colour changed into light green. The nuts of uniform size, shape, healthy, free from any mechanical injury were selected from harvested lots.