



## RESEARCH PAPER

# Influence of different methods and levels of irrigation on vegetative growth and yield of oil palm (*Elaeis guineensis* Jacq.)

M. Chandra Surya Rao, B.N. Rao\*<sup>1</sup>, V. Vijaya Bhaskar, K. Suresh<sup>1</sup> and D.V. Swamy  
Department of Horticulture, Dr. Y.S.R. Horticultural University, Venkataramannagudem,  
West Godavari (A.P.) India

**Abstract :** A field experiment with two methods and three levels of irrigation using crop factor was carried out on eighteen years old oil palm plantation at ICAR-Indian Institute of Oil Palm Research, Pedavegi to find out their influence on vegetative growth and yield of fresh fruit bunches during the year 2016-2017. The data obtained have indicated non-significant differences for most of the parameters evaluated. However, application of irrigation water through drip method at crop factor 0.8 recorded highest number of leaves produced (25.83), highest number of female inflorescences (7.16), lowest number of male inflorescences (5.12) which contributed to increased production of number of fresh fruit bunches (7.16), total weight of FFBs (148.44 kg/palm/year) thereby FFB yield (21.23 t/ha). Further, the same treatment combination has increased percentage of fruits to the bunch (64.79%).

**Key Words :** Crop factor, Female inflorescence, Fresh fruit bunches, Male inflorescence, Oil palm

**View Point Article :** Rao, M. Chandra Surya, Rao, B.N., Bhaskar, V. Vijaya, Suresh, K. and Swamy, D.V. (2019). Influence of different methods and levels of irrigation on vegetative growth and yield of oil palm (*Elaeis guineensis* Jacq.). *Internat. J. agric. Sci.*, **15** (1) : 84-90, DOI:10.15740/HAS/IJAS/15.1/84-90. Copyright@2019: Hind Agri-Horticultural Society.

**Article History :** Received : 23.07.2018; Revised : 28.11.2018; Accepted : 04.12.2018

---

\* Author for correspondence:

<sup>1</sup>ICAR-Indian Institute of Oil Palm Research, Pedavegi, West Godavari (A.P.) India (Email: [simhambezawada1@gmail.com](mailto:simhambezawada1@gmail.com))