

## EVALUATION OF ORGANIC CARBON STATUS IN SOILS OF JAIJAIPUR BLOCK IN DISTRICT JANJGIR-CHAMPA OF CHHATTISGARH

Kumar Dhar Sahu\*, Sangeeta Joshi and Harish Kumar Mahla

Department of Soil Science and Agricultural Chemistry, Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh, 492012

Email: [kumardsahu111@gmail.com](mailto:kumardsahu111@gmail.com)

Received-05.03.2015, Revised-24.03.2015

**Abstract:** A Study was undertaken to evaluate the fertility status of Jaijaipur block in Janjgir- Champa district, Chhattisgarh covering 105 villages during 2011-2012. The systematic collection of samples in geo-referenced surface (0-0.15m) soils samples from 2485 sites representing *Inceptisols*, *Alfisols* and *Vertisols* using Global Positioning System. The statistical description of soil characteristics indicated that the The organic carbon content in these soils varied from 0.22 to 0.75% (mean-0.46%), which was observed to be low to medium in organic CARBON status. The present study revealed that there is wide variation in soil low to medium in organic carbon.

**Keywords:**

### REFERENCES

**Subbiah, B. V. and Asija, G. L.** (1956). A rapid procedure for the determination of available nitrogen in soils. *Current Science*, **25**: 259-260.

**Walkley, A. and I.A. Black** (1934). An examination of degtjarefe method for determining soil organic matter and a proposed modification of the chromic acid titration method. *Soil Sci.*, **37**: 28-35.

**Black, C. A. and Evans, D. D.** (1965). Method of soil analysis. *American Soc Agron*, Madison, Wisconsin, USA. 131-137

**Chatterjee, G., Chatterjee, P. and Basak, R. K.** (2006). Organic carbon status of some blocks in Hooghly District of West Bengal. *Environment and Ecology*. **24** (S1): 236-237.

**Chibba, I. M. and Sekhon, G. S.** (1985). Effect of pH and organic carbon on availability of nutrients in acid soils. *J. Indian Soc. Soil Sci.* **33**: 409-411.

**Gupta, S. C. and Kapoor, V. K.** (2005). Fundamental of Mathematical Statistics. Sultan Chand and Sons, Educational Publishers. 10.1-10.40.

**Jena, D., Mohanty, B. and Nayak, S. C.** (2008). Distribution of available sulfur, zinc, copper,

iron, manganese and boron in deltaic alluvial soil (Ustipsamment) in relation to certain soil properties. *Environment and Ecology*. 2007; **25** (4): 730-733.

**Kanthalia, P. C. and Bhatt, P. L.** (1991). Relation between organic carbon and available nutrients in some soils of sub-humid zone. *J. Indian Soc. Soil Sci.* **39**:781-782.

**Murthy, J. R. and Shrivastav, P. C.** (1994). Soil fertility status in relation to terrace management of Majhera farm in lower Shiwaliks. *J. Indian Soc. Soil Sci.* **41** (1): 150-152.

**Ramesh, V., Rao, K. H., Pillai, R. N., Reddy, T. R. and Rao, D. A.** (1994). Correlation between soil chemical properties and available soil nutrients in relation to their fertility status. *J. Indian Soc. Soil Sci.*, **42**(2): 322-323.

**Sahoo, A. K., Sah, K. D. and Gupta, S. K.** (1995). Organic carbon status in the suderbans mangrove soils. *J. Indian soc. soil science.* **43** (2): 265-267.

**Sahoo, A. K., Sah, K. D. and Gupta, S. K.** (1995). Organic carbon status in the suderbans mangrove soils. *J. Indian Soc. Soil Sci.* **43**(2):265-267.

\*Corresponding Author