

# **Assessment of Ground Water Quality in Paddy-Sugarcane Areas of West Godavari District, Andhra Pradesh**

**Ch Kirankumar and G V Lakshmi**

Department of Soil Science and Agricultural Chemistry, Dr.Y.S.R Horticultural University, Krishi Vigyan Kendra, Pandirimamidi

## **ABSTRACT**

An investigation was carried out during months of May, December and March, 2006–07 to assess the ground water quality in paddy and sugarcane growing areas of West Godavari district. Three hundred water samples i.e., 150 samples each in pre and post monsoon seasons were collected from tube wells, open wells and hand pumps and were analysed for various chemical properties . In pre-monsoon season 54.66 per cent samples were found to be marginally saline, while 16.33 per cent were good for irrigation. 8.66, 4.66, 9.33, 4.0 and 2.66 per cent of samples were categorized under saline, high SAR, marginally alkali, alkali and high alkali waters, respectively. The nitrate-nitrogen content in these waters was safe in 26 per cent, moderately safe in 55 per cent and unsafe in 19 per cent of water samples respectively. In post-monsoon season 57.50 per cent of samples were good and 42.50 were marginally saline for irrigation. The nitrate-nitrogen content in 4.37 per cent samples were safe, 41.87 percent of samples were moderately safe and 53.76 per cent samples were unsafe for irrigation/drinking.

**Key words :** Classification of Ground Waters, Paddy-Sugarcane growing areas, Water Quality.