

## **Evaluation of soil fertility and mulberry leaf quality on silkworm rearing and cocoon characteristics**

Y.L. RAMACHANDRA<sup>1\*</sup>, S. PADMALATHA RAI<sup>2</sup>, H.V. SUDEEP<sup>1</sup>, P.S. SUJAN GANAPATHY<sup>1</sup> AND N.B. KRISHNAMURTHY<sup>3</sup>

<sup>1</sup>Department of Biotechnology and Bioinformatics, School of Biological Sciences, Kuvempu University, Jnana Sahyadri, SHIMOGA (KARNATAKA) INDIA

<sup>2</sup>Department of Biotechnology, Manipal Life Science Center, Manipal University, MANIPAL (KARNATAKA) INDIA

<sup>3</sup>Department of Biotechnology, Shridevi Institute of Engineering and Technology, Sira Road, TUMKUR (KARNATAKA) INDIA

(Accepted : August, 2008)

Soil samples were collected from six different mulberry growing areas of Malnad region of Karnataka and analyzed for the soil fertility and leaf quality parameters. The influence of soil nutrient status on mulberry plant growth and leaf quality with regard to five varieties M<sub>5</sub>, DD, S<sub>54</sub>, S<sub>36</sub> and V<sub>1</sub> and the overall impact on silkworm larval growth and cocoon characteristics were studied in detail. It was observed that the six sampling areas differed significantly in the parameters analyzed. Variety V<sub>1</sub> from Kadur region showed the best result among all the five varieties grown in six sampling areas.

Key words : Cocoon characteristics, Leaf quality, Mulberry growth, Larval growth, Soil nutrient status.