

Short Communication

Effect of Mycoplasma on the Chlorophyll Contents of Brinjal

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The growth of a plant is very much dependent upon the amount of chlorophyll content as chlorophyll is the main pigment involved in the production of organic matter, *i.e.* carbohydrates. The chlorophyll content is an ecological index as well as growth parameter (Billore and Mall, 1975). The amount of chlorophyll content present in a leaf has a direct correlation with the plant growth rate. Brinjal plants are sensitive to Mycoplasma and easily get infected showing retarded growth. All these morphological manifestation result due to physiological disturbances caused by infection. Physiological studies are thus of immense importance in diseased plant. It has already been shown that by increasing photosynthetic efficiency production can be increased (Rosenow, *et. al.*, 1983). Therefore, the present study is an attempt to show a correlation between chlorophyll content and diseased plants.

Seeds of Brinjal (*Solanum melongena*), var. *Pusa uttam* were sown in the fields at the experimental field of Department of Agricultural Microbiology, Aligarh Muslim University, Aligarh. The leaf samples were collected at maturity. The chlorophyll contents (a, b & total) were determined (Lichtenthaler, 1987). The results are being presented in Table 1.

It is generally believed that Mycoplasma causes a reduction in growth of the plant. The data clearly shows that the chlorophyll contents in healthy plants (chl-a 0.399, chl-b 0.318 and total chl 0.717) is more as compared to infected which are chl-a 0.248, chl-b 0.209, total chl 0.457. The reduction in photosynthetic pigment due to infection seems to be a well

Table 1. Effect of Mycoplasma causing little leaf of brinjal on chlorophyll contents.

Doses	Chl-a Mg g ⁻¹ FW	Chl-b Mg g ⁻¹ FW	Total Chl Mg g ⁻¹ FW
Healthy	0.399	0.318	0.717
Infected	0.248	0.209	0.457

known phenomenon (John, 1963 and Elmer, 1925). The reduction in chlorophyll contents usually results due to normal cell enzyme that attacks chlorophyll (Goodman, *et. al.*, 1967).

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