

## Relationship between extractable chlorophyll content and SPAD values in three varieties of Kacip Fatimah under greenhouse conditions

### ABSTRACT

Relationship between extractable chlorophyll and relative chlorophyll values obtained using Soil Plant Analytical Development (SPAD)-502 meter were determined in three varieties of *Labisia pumila* (alata, pumila, lanceolata) under greenhouse conditions using fresh weight basis. The experiment was arranged as a complete randomized design replicated three times with each experimental unit containing five plants. There were no significant differences ( $P \geq 0.05$ ) for all the three varieties in their chlorophyll a, b and total. Best fit relationship was found to be linear in chlorophyll a, b and total ( $P \leq 0.01$ ) with ascending slope as SPAD values intensified. Chlorophyll b was higher than chlorophyll a in all the varieties indicating species as shade-loving plants. The chlorophyll content of *L. pumila* leaves can be conveniently determined using SPAD-502 chlorophyll meter, a technique providing simple, rapid, and nondestructive method to estimate leaf chlorophyll content which could also be an indicator of leaf nitrogen (N) status.

**Keyword:** Chlorophyll a and b; Indirect plant nutrient status; Nondestructive chlorophyll estimation; Shade loving species