

Study on the behavior of leaves senescence in soybean¹

Wen-Yann Ding²

Summary

In order to study the components change of leaves at different nodes of soybean plants during reproductive growth period, Dah-liarn cultivar was grown. When soybean plants were continually depodded beginning at 2 weeks after flowering, chlorophyll content was determined each week.

Soybean leaves were subjected to two types of senescence, leaves at lower nodes progressively senesce after flowering; until the sixth week after flowering, the whole plant was subjected to monocarpic senescence. Soluble protein content was not declined coincidentally while the whole plant was subjected to monocarpic senescence.

The obvious changes of leaves was the decline of chlorophyll content during reproductive growth period. Early depodding caused the level of chlorophyll at upper nodes to continue to increase than control, podded plants. However, between 4 and 5 weeks after flowering, pod removal could prevent leaf senescence at lower and middle nodes. Although both early and late pod removal delayed the loss of leaf chlorophyll, but the effect of late pod removal was less than early treatment.

(Key words: Soybean, Senescence, Depodded)

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². Assistant, Lan-Yang Branch station, Hualien DAIS.