

## EFFECT OF DEPODDING ON SPECIFIC LEAF WEIGHT AND PHOTOSYNTHETIC RATE OF SOYBEAN

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### Abstract

To determine the importance of the relationship between source and sink in soybeans (*Glycine max* L. Merrill), field-grown plants were used as the experimental materials during reproductive stages in 1989 and 1990. From  $R_1$  to  $R_3$ , flowers and pods were removed daily; specific leaf weight, total leaf N content, leaf photosynthetic rate and other leaf photosynthetic traits were determined in each reproductive stages.

From early to late reproductive stages, the specific leaf weight of treatment group increased more obviously than that of control ones. The leaf photosynthetic rate and total N content (%) slightly decreased at early reproductive stages but enhanced soon after  $R_3$  stage and was obviously higher in treatment group than that in control ones at later stages. Depodding enhanced the leaf photorespiration rate and  $CO_2$  complementary point at late pod-filling stages.

The results indicated that the leaf photosynthetic rate were enhanced by the growth of fruits while the leaf photosynthetic rate were decreased by the leaf senescence at pod-filling stage.

**Key words** Soybean; Depodding; Specific leaf weight; Photosynthetic rate

### 关于采用大豆优良品种与种籽

在适期播种条件下,高产品种首先生育期要适合本地区的无霜期长短,积温大小,以及栽培制度的需要。东北三省是一年一季的春大豆,关内一年多熟地区就须按适应于前茬后播种,及不误后茬作物播期来采用生育期适合的品种了。自北部地区及冷凉山区引入的大豆品种倾向早熟矮小,不易高产;自南部向北部或冷凉地区引入的品种则倾向晚熟高大繁茂,但会因生长期延长致秋霜造成严重减产,或误了后茬的播期,因此,切勿盲目慕名花高价自远地购买未经试种过的品种种籽种植。应当依靠本地区种籽部门或技术推广中心的咨询,选用生育期适合的品种,这是高产的关键。高产大豆品种要求相适应的土地条件,在肥沃的平川地区,要注意采用类似合丰 25 号的秆强品种,但在沙碱及山岗地区,这类品种矮小低产,应选用像合丰 29 号高大繁茂性好的品种。大豆生长期间封垅完好而又不显明倾斜的长相才是高产长相。现在大豆病害如灰斑病较重,应通过咨询了解,不要采用很易感病的品种,而采用各方面适合而又抗病的品种。

优良品种还必须配合上优良的种籽。优良种籽应当是品种纯度高,种粒整齐,色气正,没有破裂皱缩病霉,发芽率高,夹杂物及草籽少。每年适当到种籽部门购买划级的良种,不要用商品豆当种籽,也不要自无证的种籽贩子买种籽,与别人串种时也要掌握好种籽标准。只有种良种才能高产,巴彦县的大豆高产“永常模式”中,采用一级或二级良种是重要的一条。

(编者)