

tion was from the thirty—sixth day to the fourth—sixth day after flowering . Afterwards, oil content of most soybean varieties had a slight reduction and a slight rising after the reduction. Relative protein content was higher at early stage of seed development and reduced at medium stage, and some varieties had a little rise after the reduction, and some rose steadily.

In soybean varieties with same maturity, if protein content was higher in incipient period of seed development the content would be still higher in mature period. The oil was similar to protein content in developmental variation.

Absolute content of oil accumulated upward in straight line manner during seed development, a few varieties had a little reduction after maturity. Variation of absolute seed protein content was similar to that of oil.

**Key words** Soybaen; Accumulation; Protein; oil

## 大豆鼓粒期喷施绿丰素增产效果显著\*

1992 年,于大豆的鼓粒期(8 月 25 日)进行了“绿丰素”增产效果对比试验,试验在农民张永堂的承包责任田里进行。责任田两合土质,面积 1 亩,前茬小麦(亩产 700 斤)。种豆前亩底施鸡粪 3000 斤,大豆初花期亩施磷酸二铵 10 斤。供试品种为分枝性强,亚有限结荚习性的高产新品种“洪引一号”。试验设置喷药与喷水(CK)两处理三重复。折合亩用药量 1 包(商品剂量,50 克)收获期田间测产(9 月 25 日),室内考种,收获后计实产。试验表明,在大豆鼓粒期喷施“绿丰素”具有显著增产作用。喷药比喷水平均增产 11.2% 以上(其中理论单位增 11.21%,实收单产增 15.2%),喷施绿丰素后大豆落叶早、成熟期提前(3—5 天),且籽粒颜色(黄色)变深,改善了大豆的商品品质。

从试验结果可以看出:喷施绿丰素增产的主要原因是灌浆速度加快,空瘪粒减少,结实率相应提高。突出表现在喷药后株平均三、四粒荚数增加 5 个,株平均四粒荚数增加 6.7 个,平均株粒数比喷水多 21.6 粒。农民的反应是:“这种药还真管用”。

值得注意的是,于大豆鼓粒期喷施绿丰素后,粒重略有下降。这可能与喷药后大豆单株结实率及生产力提高,而地力及大豆单株生产力有一定限度有关,有待进一步研究。

### 测产结果及实产情况

(大豆鼓粒期喷施绿丰素增产效果)

1992 年

类 处 理	亩株数	4 粒 荚 数	3 粒 荚 数	2 粒 荚 数	1 粒 荚 数	株粒数	百粒重 (克)	理论单产 (斤/亩)	折实单产 (斤/亩)
喷药	8112	9	20.3	14	5.7	130.6	23.88	506	485
喷水(CK)	8215	2.3	22	14.6	4.6	109	25.42	455	421

张玉峰

(江苏省沛县农业局作物技术栽培指导站)

\* “绿丰素”系江苏省农科院土肥所研制,徐州市农业局提供。