Research Notes: Kasetsart University

Sumin Smutkupt
Kasetsart University

Follow this and additional works at: http://lib.dr.iastate.edu/soybeangenetics

Part of the Agronomy and Crop Sciences Commons

Recommended Citation
Available at: http://lib.dr.iastate.edu/soybeangenetics/vol1/iss1/9

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Soybean Genetics Newsletter by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
1. A note on a soybean mutant.

Seeds of S.J.2, a Thai soybean variety, were treated with gamma rays of a cobalt source in five different doses: 5, 10, 15, 20 and 30 krad, respectively.

In M2 generation, yellow seedlings appeared in the treated materials, with the frequency ranging from 0.20 to 0.70%. Two different types of yellow seedlings were observed. The first type: the seedlings had both yellow cotyledons and yellow first single leaves. They died at the seedling stage. The second type: only the first single leaves were yellow, but turned green toward maturity.

Line Number 41-10 was obtained from the second type. Its plant height at maturity is somewhat shorter than that of the mother variety. This mutant has 44% protein (on dry matter basis), about 2% higher than that of the mother variety.

Sumin Smutkupt

KOBE UNIVERSITY
Laboratory of Plant Breeding
Faculty of Agriculture
Rokkodai, Nada, Kobe, Japan 657

1. An attention to the heritability of pod dehiscence as affected by environment.

Pod dehiscence or shattering is an agronomic character of importance in breeding soybeans adaptable to machinery cultivation. Caviness (1969) had presented heritability estimation of pod dehiscence in four crosses between varieties in the United States and the wild soybean, and the values in broad sense in F2 generation were very high (over 90%). The author (Nagata, 1974) has reported results of observations of pod dehiscence under