

SIPING BOROK' (JHUM TIL) - SOURCE OF SOME VALUABLE GENES

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Sesamum is a major oilseed crop of Tripura. Improved sesamum varieties are relatively new to the State. However, some varieties of sesamum locally known as 'Siping borok' (*Jhum til*) have been cultivated by the *Jhum* farmers as well as by the settled cultivators of the State since very old time. The seeds have been used for religious ceremonies besides extracting oil. *Jhum til* is mainly grown in mixture with rice, *mesta*, cotton and vegetables on slopes and tops of the uplands. The present note deals with the agronomic features of this sesamum.

The seeds were collected from different localities and grown during the crop season (July-Nov.) in 1987 at ICAR Research Complex, Tripura Centre alongwith 26 improved sesamum varieties in 2 replications. No variation was observed among the local collections except for the seed colour. Two types of seed colour viz. white and black were observed in the material. The leaves were trilobiate with highly serrated margins. The plants were characterised by very slow growth rate, tall habit and late maturity. Flowering has got 2 or more peaks. There is no lodging. Capsules and seeds were smaller. Maturity is nonsynchronous. The branches were confined to the upper portion of the stem which gave an appearance of a broom. The stem was rectangular with ridges. The important Agronomic traits are given in Table 1.

TABLE 1 Agronomic features of '*Jhum til*'

Days to first flower	---	75
Days to 50% flowering	---	85
Plant height (cm)	---	151
No. of branches/plant	---	5
No. of capsules/plant	---	46
Capsule length (cm)	---	2.0
No. of seeds Capsule	---	36
1000 seed weight	---	1.34 g.
Single plant yield	---	2.2 g.
Days to maturity	---	127

It was observed that the plant was resistant/tolerant to *phytophthora* blight and tolerant to leaf curl under field conditions. All the *Jhum til* plants (200) were free from the infection of *phytophthora* while the improved varieties (26) grown alongwith it suffered heavily due to *phytophthora* blight. This might be the main reason for its

wide adoption by the farmers inspite of its poor yield. It could be successfully utilised as source of resistance to these serious diseases of sesamum since other source of resistance to these diseases are limited.

Sesamum is a major oilseed crop of India. However, some varieties of sesamum locally grown in the State (Madhya Pradesh) have been cultivated by the farmers in the State since very old times. The seeds have been used for oil and vegetable cakes extracting oil. Some of the main sources of resistance to these diseases are limited.

The seeds were collected from different localities and grown during the crop season (July-Nov.) in 1957 at the Research Station, Central Board of Horticulture, Lucknow. The variation was observed among the local collections except for the seed colour. Two types of seed colour, viz. black and white were observed in the material. The black seeds were found with highly variable maturity. The plants were characterised by very slow growth rate, tall plant and low yield. Flowering was not 2 or more weeks. These seeds were found in the upper portion of the stem which was an indication of a mutant. The seeds were collected from the same locality as given in Table I.

TABLE I. Characteristics of Sesamum

Character	Value
Days to maturity	100
Yield (kg/ha)	1.0
No. of branches/plant	10
No. of siliques/plant	10
Oil content (%)	30
Protein content (%)	20
Moisture (%)	10
Seed colour	Black
Plant height (cm)	150
Days to maturity	100

It was observed that the plant was resistant to these diseases. The seeds were found in the upper portion of the stem which was an indication of a mutant. The seeds were collected from the same locality as given in Table I.