

Development of New Variety of Sugarcane

1674. **SHRI E. V. VIKHE PATIL:**
SHRI R. V. SWAMINATHAN:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether Government are aware of the fact that the percentage of sugar content in sugarcane grown in India in general and Maharashtra in particular is going down gradually;

(b) whether Government have sponsored any research to find out the causes of this phenomena; and

(c) whether any effort either at Government or private research institutional level is being made to develop new variety of sugarcane with high percentage of sugar contents, if so, the highlights thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI ANNASAHEB P. SHINDE):

(a) The percentage of sugar content in sugarcane grown in India in general is not going down gradually. The percentage had increased from 9.33 in 1969-70 to 9.79 in 1970-71 and 10.04 in 1971-72. It, however, went down to 9.60 per cent in 1972-73.

In the case of Maharashtra it increased from 10.76 in 1969-70 to 11.29 in 1970-71. In 1971-72 and 1972-73, however, the percentage declined to 11.09 and 10.73, respectively.

(b) The Department of Agriculture had constituted an Expert Committee to go into the question of low recoveries in the country in general, and in Maharashtra in particular.

The Committee amongst others recommended the breeding of new varieties with higher percentage of sugar, in addition to intensifying research on artificial cane ripeners, long term effects of inorganic fertilizers on soil productivity and plant protection.

The sugarcane Breeding Institute, Coimbatore, Indian Institute of Sugarcane Research, Lucknow and the All India Coordinated Project on Sugarcane Improvement with its research centres in the major sugarcane growing areas of the country have oriented their research programmes towards finding solution to these problems.

(c) Sugarcane Breeding Institute, Coimbatore has evolved 10 varieties which are early maturing with high sucrose content. Some of these varieties have 19-20 per cent sucrose in juice even at 10 months age of the crop. Presently, these varieties are under multi-location testing all over the country. In addition, the participating centres under the Coordinated Projects have also been engaging in breeding varieties suitable to their respective regions by utilising the 'Chiff' (i.e. true seed) supplied from the Sugarcane Breeding Institute.

As far the work on artificial cane ripeners, it may be mentioned that the spraying of 9 month old sugarcane crop with a chemical called cycocel on CCC at the rate of 4 kgs./hectare showed a significant improvement in the juice quality 59 to 70 days after spraying in difficult to ripen conditions of south-east coastal regions of Tamil Nadu and Andhra Pradesh.

Experiments on the effect of inorganic fertilizers on sucrose content have been in progress at Padagaon in Maharashtra and the results will become available only after the conclusion of these experiments.

With a view to ensure disease-free, quality sugarcane seed which is very essential for improving yields, a Foundation Seed Production Programme has been initiated last year at 8 selected centres. In addition, research on Plant Protection problem—through chemical and biological means—has been intensified. It has been found that the application of phorate has successfully controlled top shoot borer in Punjab.