

Prevalence of Strains A and F of Sugarcane Mosaic Virus (SCMV) in Bangladesh

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Sugarcane mosaic virus disease is considered to be a great potential hazard at present in Bangladesh. The condition prevailing in this country is favourable for its fast propagation. Two distinct types of mosaic infection were reported by Ahmed *et al.*, (1979). The more common and wide spread one is "mild" or "green" type and the other one is "severe" or "Yellow" type, the latter showing very pronounced symptoms and greatly reduced growth.

On observing the mild and the severe type of symptoms and reduction in growth it was presumed that there might be some different strains in Bangladesh. So far 13 strains (SCMV) were identified in the world and they are designated as A B C D E F G H I J K L and M (Koike, 1976). Six strains were reported from India. The strain 'F' is the predominant strain in Pakistan and India (Bargava *et al.*, 1971; Gillaspie *et al.*, 1980). A new virulent strain of SCMV 'L' was reported from Meigs, Georgia (Nakata and Hidaka, 1975). From the Philippines (Dosayla and Benigno, 1980) identified strains A, D and H. Leaf samples of seven mosaic infected varieties of Isd.5/55, I-156/66, BO.70, Co.1153, Co.975, Q.69 and Isd.1/53 were sent from Bangladesh to Beltsville Agricultural Research Centre USDA for identification. These were confirmed by differential varietal tests which are as follows :

Variety	Strains
Isd.5/55	A
Isd.1/53	F
I-156/66	F
Co.1158	F
Co.975	F
BO.70	F
Q.69	F

The strain 'A' produces brighter symptoms than strain 'F' having slightly longer streaks alternate with normal green portions.

Attempts were made to inoculate growing stalks and seed pieces at this Research Station but no success was obtained. It is assumed that probably due to hot weather prevailing at the time of inoculation the disease did not develop. Attempts were also made on natural spread of the disease by planting one row of healthy setts followed by two rows of diseased setts on either side but the result showed no transmission to healthy one. Under field condition the disease was prevalent in almost all months. The October and November planted canes began to show symptoms from February onwards. In May-June very clear symptoms were observed and the yellowing and growth reduction were noticed. In some varieties the symptoms masked/disappeared in August/September but reappeared afterwards.

ACKNOWLEDGEMENT

The authors are highly thankful to Dr. A. G. Gillaspie Junior, Chief, Applied Plant Pathology Laboratory, Beltsville Agricultural Research Centre, Maryland USA for identifying the strains. Thanks are also due to Dr. T. A. Bull, Research Advisor, Mr. A. P. Smith and Mr. S. J. Evans, 'BASIP' for their help in sending the sample to Beltsville.

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