GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:1542
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BT. COTTON
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether a consensus has emerged among top entomologists about the main cause of failure of Bt. varieties of cotton in South India;

(b) if so, the details thereof;

(c) whether the Union Government recently allowed the trials of varieties with two genes while those released in the southern States had just one gene; and

(d) if so, the details and the steps the Government proposes to take to meet the situation?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTI LAL BHURIA)
(a) & (b): Entomologists of Tamil Nadu Agricultural University (TNAU) have conducted experiments with the Bt cotton viz. MECH-184 with check Bunny during 2004-05. The results revealed that against four insecticidal applications for the control of bollworms in the check (Bunny), one round of insecticide application was given based on ETL. The incidence of natural enemies was normal in both the varieties. Maturity was 20 days in advance in Bt. Cotton and in five pickings the harvest was over compared to check variety where 10-11 pickings were necessary. the yield increase was 18.3 per cent over check.

During the 2005-06, the monitoring team from TNAU surveyed the Bt. cotton in different districts of Tamil Nadu. The team has not come across failure of any Bt cotton variety in terms of bollworm damage.

(c) & (d): Yes, Sir. The first set of hybrids were evaluated with single (Cry 1 Ac) gene only. Research efforts were under way simultaneously to find out more genes with resistance to bollworms. As more genes were identified, simultaneous efforts were also taken to put more than one gene in a genotype. Recently scientists have succeeded in putting 2 genes (Cry 1 AC and Cry 2 A) (b) in cotton genotypes. Such genotypes are already under cultivation in other countries. Hence, attempts are being made in India to introduce both the genes in Indian cotton hybrids. Such hybrids are being, evaluated in the ICAR trials in both Central and South Zone.