

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

UNSTARRED QUESTION NO:1293  
ANSWERED ON:30.07.2003  
BIO DEGRADATION OF PLASTIC  
PUTTASWAMY GOWDA

**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

- (a) whether the Government have taken any steps to bio-degrade the high volume commonly used plastic bags, cups etc. ;
- (b) if so, the details thereof ;
- (c) whether a Pune based National Chemical Laboratory have successfully conducted tests which show that the use of sugar can break down plastics in months; and
- (d) if so, the steps taken by the Government to encourage this device to combat the menace of plastic in the country ?

**Answer**

MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY (BACHI SINGH RAWAT)

(a),(b)&(c) Yes Sir. Scientists at NCL, a constituent laboratory of Council of Scientific & Industrial Research, have carried out exploratory studies, by which a conventional non-biodegradable plastic can be rendered biodegradable by attaching chemically a sugar moiety to polystyrene . Compared to polystyrene, the sugar modified polystyrene showed a greater ease of biodegradation. The studies are not complete. The industrial applications and commercially viability are yet to be established.

(d) Does not arise.