

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 6014
TO BE ANSWERED ON 11/04/2017

DISEASES IN PLANTS

6014. SHRI NARANBHAI KACHHADIYA:

Will the Minister of AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether climate change is the main reason for the emergence of various species, which cause disease in plants;
- (b) if so, the names of such species which have emerged due to climate change and the varieties of plants and crops for which these are most harmful; and
- (c) the measures being taken by the Government to fight against these species?

A N S W E R

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री
(SHRI SUDARSHAN BHAGAT)

- (a) Climate change and climate variability do influence the dynamics of insect pests and diseases in various crop plants. However, the climate change is not the only factor for emergence of new pests in plants.
- (b) Depending on the agro climatic zones and associated cropping systems, climate change is influencing pests including diseases of agricultural and horticultural crops.

Increasing species of sap feeders viz., thrips, whiteflies and jassids have led to the emergence of tospovirus (tomato, groundnut), begomo virus particularly leaf curl and mosaic (cotton, pulses and cucurbitaceous vegetables) and phytoplasma (big bud on tomato, little leaf of Brinjal) are a few examples, associate with variable climate change, respectively.

- (c) Mapping of disease scenarios across agro climatic zones through data base development and weather based forecast of vectors and diseases are aiding issue of 'pest/disease alerts' in epidemic locations. Well established resistant varieties seeds, biological and chemical methods of disease management are disseminated based on in season field surveillance at regional levels by various crop research institutes of ICAR, State Agricultural Universities, *Krishi Vigyan Kendra* partnering with Department of Agriculture of different States.