- (b) if so, which are the States where it is prevalent and what is the quantum of destruction; and
- (c) what are the remedial measures taken and the results thereof?

The Minister of State in the Ministry of Food and Agriculture (Dr. Ram Subhag Singh): (a) Yes.

(b) South Malabar, parts of Cochin in Kerala, Western Mysore, South and North Kanara Districts of Mysore and Maharashtra.

The quantum of destruction is estimated to range from 25 per cent to 75 per cent the total production.

(c) Arecanut bunches are sprayed with one per cent bordeaux mixture before the monsoons (late May). The spraying is repeated during a break in the rains in July—August.

Seventy-five to eighty per cent of the crop has been saved by adopting the above measures in the regions where the crop was infected with 'Mahali'.

Destruction of Vinegardens Due to Diseases in Kerala

Shri A. K. Gopalan:
Shri Umanath:
Shri Pottekkatt:
Shri M. K. Kumaran:

Will the Minister of Food and Agriculture be pleased to state:

- (a) whether hundreds of acres of pepper vine-gardens are destroyed by certain diseases in Kerala;
 - (b) if so, what is the extent of loss;
- (c) whether any special investigations in the matter as also in regard to remedial measures to control the diseases have been made; and
 - (d) if so, the result thereof?

The Minister of State in the Ministry of Food and Agriculture (Dr. Ram Subhag Singh): (a) and (b). Some of the pepper vine gardens in Kerala are affected by diseases like 'pollu' and 'wilt', but the production figures

furnished below do not reveal any appreciable fall in yield:—

	Year	Production (in tons)
(Second Plan period)	1956-57 1957-58 1958-59 1959-60 1960-61	26,800 26,000 25,000 24,900 26,600
(First year of Third Plan) .	1961-62	26,550

(c) and (d). Yes; investigations have already been and are also in progress at the Pepper Research Station, Panniyur. The State Department of Agriculture have proposed to intensify work in this regard in the technical programme of Pepper Research Scheme jointly financed by the Indian Council of Agricultural Research and the State Government of Kerala.

Spraying of D.D.T. 50% by the end of July and thereafter once a month, twice or thrice according to requirements has been found to be very effective for 'pollu' disease.

Regarding wilt disease, removing all wilt affected parts of the vine and burning to prevent further spread; spraying the entire vine with one percent Bordeaux mixture and drenching soil with Ceresan (wet) one ounce in six gallons of water, have proved effective in controlling this disease.

Wide publicity has been given to the control measures recommended and found effective by the State Department of Agriculture.

Insecticidal sprayers are stocked at suitable places and made available to cultivators. The results of the above control measures are being watched and they are expected to yield results in due course.