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DISEASES OF WINTER VEGETABLES IN CACHAR DISTRICT OF ASSAM

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Cachar district of Assam is stituated it the southern part of the State occupying an area of 3876 sq. km. The physiography of the district is heterogeneous in nature varying from small hillocks *(tillah)* to lowlying water logged areas. The are under *rabi* crops is 72.362 ha accounting 38.49% of the total agricultural lands. Vegetables are generally grown commercially in the reverine tracts after recession of flood and also in homesteads for day to day consumption. The district experiences heavy rainfall (average 3061.7 mm) with relative humidity (average 79.5%) and temperature (max. 30.1° C and min. 19.6°C) which favour high build up of pest and diseases resulting heavy losses to some vegetable crops.

In the present investigation an attempt was made to have a detailed survey of the diseases of winter vegetable of Cachar district of Assam. For this purpose regular visits were made to the vegetable growing areas around KVK, Cachar during October 1998 to February 1999. The diseased samples were collected and identified after detailed study following (Singh, 1973; 1982). The disease severity was determined after visual observation and categorized as Mild (M), Moderate (Mo), Severe (S) and Very Severe (VS).

Altogether 22 fungal, 3 bacterial, 6 viral and 2 nematode diseases were identified. Among them 7 were found to be very servere, 10 severe, 12 moderate and 4 mild disease. In this investigation, it was found that bacterial wilt of tomato, brinjal, collar rot of french bean and root knot nemabode of brinjal caused havoc to the farmers. The high incidence of diseases might be due to high humidity and ideal temperature for disease development as reported by Narayan Bhat *et al* (1997).

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Table 1 : Disease of winter vegetable crops in Cachar district of Assam

Crop and disease	Causal organism	Severity
Fungal disease		
Bottle gourd		
Anthracnose	Collectotrichum laginarum	M
Powdery mildew	Oidium sp	M
Brinjal		
Phompsis blight	Phomopsis vexans	M
Sclerotinia blight	Sclerotinia sclerotiorum	Mo
Cabbage		
Dark leaf spot	Attemaria bressicola	Mo
Chilli		
Frog's eye leaf spot	Cercosoora capsici	S
Ripe rot	Collectotrichum capsici	Mo
Cowpea		
Powdery mildew	Oidium sp	VS
Leaf spot	Cercospora cruenta	Mo
Frenchbean		
Leaf rust	Uromyus appeadiculatus	Mo
Colar rot	Sclerotinia sclerctiorum	S
Hyacianth bean		
Leaf spot	Septorisa sp	Mo
Laipatta		
Leaf spot	Cercospora sp	MO
Pea		
Powdery mildew	Oidium pisi	VS
Leaf spot	Ascochuta pisi	S
Fusarium wilt	Fuserum oxesporum fp. pisi	VS
Potato		
Late blight	Phytophthora infestans	S

Crop and disease	Causal organism	Severity
Early blight	Alternaia solani	Mo
Radish		
Leaf spot	Cercospora sp	Mo
Tomato		
Early blight	Alternaria solani	Mo
Sptoria leaf blight	Spetoria lycoporsici	M
Late blight	Phytophthora infestans	S
Bactarial diseases		
Brinjal		
Bacterial wilt	Pseudomonas solanecearum	VS
Cabbage		
Black rot	Xanthomonas cappestris	S
Tomato		
Bacterial wilt	Pseudomonas solanecearum	VS
Viral disease		
Chilli		
Leaf curl	Tobacco leafcurl virus	VS
Mosaic	Chilli mosaic virus	S
Franch been		
Yellow mosaic	Bean yellow mosaic virus	S
Potato		
Leaf roll	Leaf roll virus	MO
Mosaic	Mosaic virus	MO
Tomato		
Leaf curl	Tomato leaf curl virus	VS
Nematode disease		
Brinjal		
Root knot nematode	Meloidogyne sp.	S
Tomato		
Root knot nematode	Meloidogyne sp.	S