APPENDIX-E
Crop disease in South-East Punjab

Plants are affected to peculiar forms of disease, which are at times common to all crops but sometimes affect a particular staple only. In the colonial period, crops in the South-Eastern parts of Punjab were subject to al, huda, kag, kungi, pala, pigs, deer, Jackals, swarms, ujala, white ants were also harmed by birds, animals, white ants and locusts. The following were the main diseases:

*Al or ala* was a black oily appearance upon the leaves of cotton and sugarcane. It was also the name of a gregarious caterpillar, which especially attacked cotton, rape, seed and seasame.

*Huda*, the drying up of leaves, and their becoming yellow in Sawan and Bhadon, without any apparent cause.

*Kag, kagwa* or smut was produced by east winds in cloudy damp weather. It attacked wheat especially and also jowar (a kind of millet) and some times barley. But it was, as a rule, it was sporadic in the two latter.

*Kungi* or rust was produced by the same influences, which produce smut. It attacked wheat, and was exceedingly destructive.

*Pala* or frost was very injurious if severe and not accompanied by rain, or it was west wind, which blew at the time. There was a saying, "girta mih pachheta pala, yih kisan ka gala", i. e. "a tardy rain and frost are the husbandman's loss". It especially attacked cotton, sugarcane, gram, rape, seed, and early wheat while in the ear.

Animals like Pigs harmed some times all crops, pigs had a preference for rice, jowar, maize, and sugarcane.

Deer, hedges hogs and above all monkeys, were a perpetual source of trouble and mischief to the people, and the whole air came alive with birds at the time when the crop ripened.

Jackals did most harm to maize of which they "did not leave even the bones" and to sugarcane. They also ate *methi* and safflower.

Swarms of locusts were not uncommon, but they either passed on south, or settled on the sand hills and deposited their eggs where it was comparatively easy to destroy them.
Ujala or general withering up from any reason and sokha or withering up from want of water was of course evils common of all plants. White Ants ate most things, especially gram, cotton and cane. They could not move in *dakar* (hard soil) as it was too stiff and moist for them, and plenty of water will keep them away.