

blight may attack at any point, usually affecting and confining itself to only one spikelet, or later spread to other spikelets if conditions are favourable.

The first indication of infection consists of water-soaked areas, slightly brown in colour on the glumes. As the disease progresses the affected areas dry out and take on a ripened appearance. If the infection spreads into the rachis at the base of the spikelet and completely girdles it the portion of the head above this infected region will die and dry up even if it is not directly invaded by the fungus. After a while a cottony fungus growth, slightly pinkish in colour, appears on the dead surface. This growth becomes evident first at the point of infection but later may spread farther over the infected area. Conidia develop on this growth, and with age the pink tint turns to a darker salmon colour. The pinkish conidial masses are more apt to form at the bases of the spikelets where moisture is held for a longer time.

In the blighted heads the grains themselves are frequently invaded resulting in light weight, shrivelled kernels.

The pinkish coating of fungus growth occurring on the surface of diseased parts was found to consist of abundant conidia on microscopic examination. These conidia are long, slender, curved, septate, typical of the genus, *Fusarium*. The spores range in size from 35-75  $\times$  4-5.5  $\mu$  with the great majority coming within a size-range of 45-65  $\times$  4.2-5.5  $\mu$ . Most of them are 5-septate with occasional spores having as few as 3 or as many as 6 or 7 septa (Fig. 2).

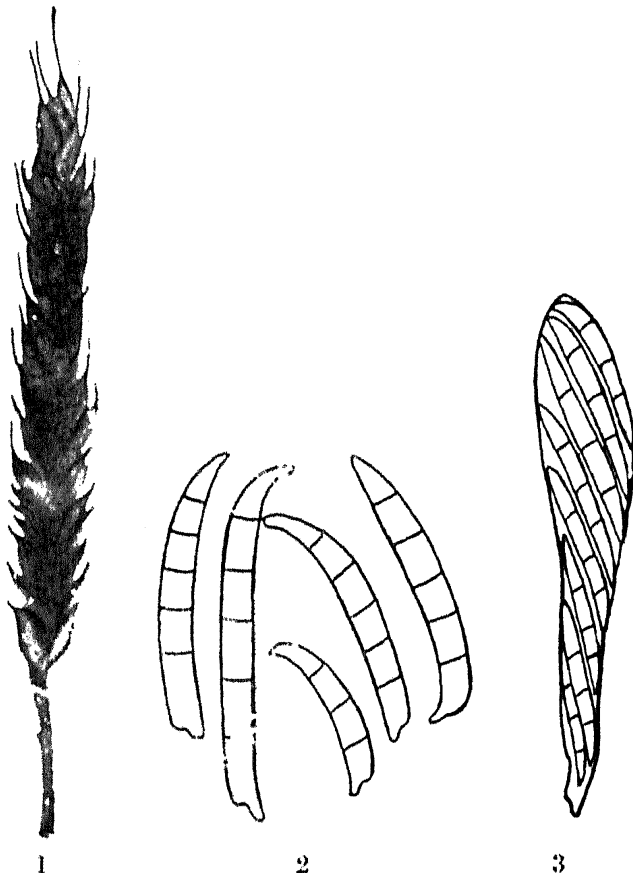


FIG. 1. Symptoms of the disease  
FIG. 2. Conidia  
FIG. 3. Ascus with ascospores

On dead blighted heads the perithecia occur as small, black bodies either singly or in groups. They rest on the surface of the host or may be more or less imbedded in the mycelial crust where conidia have been produced. They are ovoid to subconical in shape and measure 150-250  $\times$  100-250  $\mu$ . The asci may number over a hundred to the perithecium and each ascus contains 8 ascospores. The ascospores are fusiform, slightly curved, mostly 3-septate and measure 20-30  $\times$  3.75-4.25  $\mu$  (Fig. 3).

The fungus was identified as *Gibberella saubinetii* (Mont.) Sacc. This fungus is known to cause scab of cereals in Europe, America, Australia and Great Britain, but so far it had not been known to occur in India. This communication thus records the first report of the occurrence of the fungus in India.

The specimen has been kept in the *Herb. Crypt. Ind. Orient.*, Imperial Agricultural Research Institute, New Delhi, and in the Herbarium of the Plant Pathological Laboratory, Sylhet (S. Chowdhury, No. 237).

Plant Pathological Laboratory,  
Sylhet, Assam,  
March 30, 1947.

S. CHOWDHURY.

#### INDIA'S VITAMIN WEALTH

INDIA abounds in material that contain various vitamins. One such is Myrobalans (*Embellica officinalis*, "Nellikai" in Tamil). These fruits contain quantities of vitamin C—a valuable protective food. During the second world war the Nutrition Research Laboratories at Coonoor (South India) were manufacturing tablets from these fruits for the use of the Military. At that time the utilization of these fruits was so much that in certain places there occurred a famine of the local fruit. I have used these tablets with profit. As its need for Military purposes is now non-existent its manufacture has been stopped at Coonoor. Our doctors now prescribe vitamin C as medicine in the form of very costly imported material like "Redoxon". It is a pity that the utilization of one of our indigenous products has thus come to an abrupt end and to the advantage of foreign manufacturers.

Thyagarayanagar,  
Madras,  
May 6, 1947.

T. S. VENKATRAMAN.

#### THE DOUBTFUL OCCURRENCE OF A WAX-SPLITTING ENZYME

WHILE fat-splitting enzymes, the lipases, are known from animal, plant and even bacterial sources, wax, on the contrary, is apparently immune to a similar digestion. However there has been a solitary record by Sulc<sup>1</sup> who reports a wax-splitting enzyme in the frothy secretion of a spittle insect, *Aphrophora salicis*. He calls this new enzyme Cerotinase which is supposed to give rise to Cerotinic acid. The term Cerotinase gives rise to a confusion with Carotinase, the enzyme which hydrolyses Carotin. Even apart from this the proper designation should be Cerase according to the substrate upon which the enzyme acts, Cera being wax in Latin.