

there was a marked proliferation of interlobular connective tissue, presenting a characteristic picture of cirrhosis. In these areas there was some increase in the number of bile ducts. Another section (edge) showed almost complete replacement of the hepatic tissue with connective tissue."

Experimental steer No. 511, which died suddenly several weeks following apparent recovery from the disease, had a liver which consisted mostly of connective tissue.

McFarlane *et al* in New Zealand (12) describe the lesions of facial eczema in sheep as follows: "The essential pathology of facial eczema in the sheep is an acute cholangitis which in severe, acute, or chronic cases proceeds to obliteration of the duct by fibrous tissue. This latter phenomenon is immediately followed by ductule hyperplasia, canalicular infarction and hepatocellular necrosis and later by cicatrization of those areas drained by obliterated bile ducts and compensatory hyperplasia of the non-affected portions of the liver." McFarlane has shown that the icterus and cirrhosis in the liver are produced by the occlusion of the bile ducts. Thus the normal excretion of phylloerythrin is prevented and it is taken up by the blood, causing photosensitization. The kidneys then remove the phylloerythrin from the blood, producing the reddish-brown color in the urine which makes it appear bloody.

### **MOLD RELATIONSHIPS IN FLORIDA**

A close study of epidemic outbreaks in Florida revealed that they occurred from 3 to 8 weeks following a frost which killed the top growth of bermudagrass. Frost-killed grass at first becomes standing hay. As the hay starts to deteriorate, several molds appear on the dead material. One of these is especially prominent at about the time regrowth of new green blades of grass is ready for grazing. This mold is visible but can be seen more clearly with the aid of a 12-X hand lens. When bermudagrass is cut and left in bunches on the ground, mold having this appearance nearly always can be found as the dead grass approaches one stage of decomposition.

In January 1957 photosensitization appeared, following a frost, in cattle on one Experiment Station pasture in which the predominant forage was common bermudagrass. A mold growth and green forage appeared simultaneously and 4 animals developed typical cases of photosensitization. This mold was ident-