

containing a suspension of these mold spores was given twice daily for 7 days to a steer but no symptoms of photosensitization were observed.

Experiment 9.—Post mortem records of autopsied animals and of slaughtered animals that seemed to have recovered from photosensitization indicated a need for a more complete record of autopsy findings from an apparently recovered animal with a known case history. Steer No. 178 from experiment No. 3 was slaughtered for specimens on December 5, 6 months after recovery (Figs. 5, 6, 7). The important autopsy findings were recorded photographically and are presented in Figures 7, 9 and 10. Some of the discussion of symptoms on page 5 is based on the findings from this experimental animal.

TREATMENTS

An effective treatment for this condition was developed through the cooperation of 2 practicing veterinarians, Dr. C. A. Forman of Fort Lauderdale and Dr. R. D. Henthorne of Lake Worth. Sodium thiosulfate injected intravenously or given orally alleviated the symptoms of photosensitization successfully (7, 8, 9). When used as an intravenous injection, only reagent grade sodium thiosulfate was recommended at the rate of 1 ounce per 100 pounds live weight. In practice $\frac{1}{4}$ pound of sodium thiosulfate was dissolved in 500 cubic centimeters distilled water and given intravenously to a mature animal. This treatment can be repeated daily for 2 or 3 days if necessary. Commercial grade sodium thiosulfate was satisfactory for oral administration at the rate 2 ounces per 100 pounds live weight, or double the amount used intravenously. Some cases were treated successfully by giving both oral and intravenous treatments simultaneously. Some cases developed secondary infections which required treatments with intravenous sulfa drugs. The removal of green feed from the ration was an aid in recovery of affected animals.

Losses have been controlled by veterinarians and cattlemen of the area to a great extent by the sodium thiosulfate treatment. Very few animals treated in the early stages have died. Nearly all fatalities were advanced cases when treated. In the early trials, 108 of 524 untreated cattle in 1 herd died—a mortality rate of 20.61 percent. Only 5 died of 231 cattle treated in another herd—a mortality rate of 2.11 percent. Convalescence or return to normal forage consumption for treated cattle re-