

The Tail Louse, a New Pest of Cattle in Florida

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The louse *Haematopinus quadripertusus* Fahrenholz,² has been found attacking cattle in Florida. This is the first record of the occurrence of this louse in the United States. It was described from Cameroons, West Africa, in 1916 by Fahrenholz, but apparently there are no subsequent records on the occurrence of this louse elsewhere.

Haematopinus quadripertusus is a sucking louse resembling the short-nosed cattle louse, *H. eurysternus* (Nitzsch), but differs from the latter in its habits, its effect upon the host, and its susceptibility to insecticides.

The first infestations of *H. quadripertusus* were observed on cattle in Orange County, Florida, in August 1945. Surveys made during the remainder of that year revealed that this louse was a serious pest of cattle in a number of counties in southern and central Florida, especially in the Lake Okeechobee area. During 1946 additional infestations were found throughout southern and central Florida, and as far north as Gainesville, in Alachua County. Early in 1947 infestations were found at Baldwin, in Duval County, near the Florida-Georgia State line, but no infestations were found in southern Georgia.

The life history and habits of *Haematopinus quadripertusus* have not been determined. However, certain field observations are of interest, at least until more reliable data are available.

Haematopinus quadripertusus differs from other cattle lice in that its activities as an adult are confined chiefly to the brush, or switch, of the tail. For that reason the Florida cattlemen refer to it as the tail louse, and this name is suggested as an appropriate common name. On mature animals all adult lice were found in the tail brush, except in two cases where a few lice were found in the long hairs of the ears. About 30 per cent of the infested calves examined had lice in the tail brush and in the ears. The transfer of a few lice from the brush to the head of the animal is to be expected since the severe irritation caused by the lice prompts the animal to do considerable licking of the brush, at which time some lice could readily move to the head. Suckling calves are frequently close to the infested brush of the dam, which probably accounts for the larger percentage of infestations in the ears of calves.

The eggs have been found almost exclusively on the hairs of the brush, often in such great numbers as to give the brush a matted appearance. A few scattered eggs apparently of this species have been observed in the ears and around the tailhead.

No immature stages, except a few third instars, have been found in the brush. What appeared to be the first instar of this louse has been frequently ob-

served attached around the vulva and anus of cows. The second and third instars have been observed in the general vicinity under the tailhead where the skin is quite thin.

According to cattlemen and veterinarians, as well as our own observations, *Haematopinus quadripertusus* is a more serious pest of cattle than of any other species of lice. Cattle harboring a heavy infestation of these lice are rapidly sapped of their vitality, and some become too feeble to walk. While cattle of all ages and sizes show the effects of an infestation, it appears to be more serious in yearlings.

In our early work with DDT it was quite evident that sprays or dips containing 0.2 to 0.5 per cent of DDT as a suspension were effective in controlling cattle lice. It was also noted that the arsenical dips, used in the eradication of cattle fever ticks, would also control cattle lice. In fact, the dipping of cattle in arsenicals has been a common procedure in controlling cattle lice in Florida. Neither of these preparations, however, had any apparent effect upon the tail louse.

In some preliminary work on the control of *Haematopinus quadripertusus*, several insecticides, including various concentrations of DDT, were tested by immersing the infested brush into a pail of the material. Best results were obtained by the use of suspensions containing not less than 1.5 per cent of DDT. This was a slow and laborious procedure, however, and rather impractical except for the treatment of dairy cattle.

Excellent control was obtained by thorough spraying of infested cattle with a suspension containing 1.5 per cent of DDT, applied at the average rate of 1.6 pints per animal, giving an average deposit of 10.5 grams of DDT per animal. One herd of about 600 head of heavily infested cattle was used in this test. About 100 mature animals were examined, and all were infested. Of the 52 calves examined, 38 were infested. The animals were thoroughly sprayed on all parts of the body, including the brush of the tail, and thorough coverage was obtained by two spray operators working from opposite sides of a small pen. A power sprayer was used.

The cattle were sprayed on October 18, 1946. On November 6, 84 animals were examined and no live lice were found. On November 26, 54 animals were examined and 1 louse was found on each of 2 cows. On January 6, 50 animals were carefully examined and no lice were found. Eight untreated animals serving as checks maintained a heavy infestation of lice.

SUMMARY.—A cattle louse, *Haematopinus quadripertusus* Fahrenholz, new to the United States, was found in Florida in 1945. This louse was described from West Africa in 1916, but no subsequent records are available to show its occurrence elsewhere. It is a more serious pest of cattle than the other species of cattle lice and is more difficult to control. Practically all the adults and eggs are found in the brush of tails of cattle. Good control has been obtained by thorough spraying of the infested cattle with a suspension containing 1.5 per cent of DDT.—4-24-47.

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² Determinations by F. W. Musebeck.