

amination of diseased lung tissue. The virulency of this organism for small laboratory animals was typical of the *Pasteurella* group. Species of *Staphylococcus* and *Penicillium* were isolated from the lung tissue of several calves that were autopsied in advanced stages of the chronic form of pneumonia.

PARASITOLOGICAL FINDINGS

Careful microscopic search was made of stained blood smears obtained from chronic cases of enzootic bronchopneumonia for presence of the hematozoon, *Anaplasma marginale*, without obtaining evidence of this infection. Clinical examinations of cases of enzootic bronchopneumonia showed that many of the animals were infested with the blood-sucking louse, *Linognathus vituli*. Microscopic examination of fecal samples secured from young calves during the early stages of the disease showed presence of coccidia, *Eimeria* sp., and nematode ova. Microscopic examination of the feces of older calves suffering from the chronic form of enzootic bronchopneumonia revealed the presence of heavy nematode and cestode infestations in addition to the coccidia. Postmortem examinations of yearlings which survived an acute attack often showed the presence of several species of internal parasites including hookworm, *Bunostomum phlebotomum*; tapeworm, *Monozia benedeni*; nodular worm, *Oesophagostomum radiatum*; stomach worm, *Haemonchus contortus*; whipworm, *Trichostrongylus ovis*; lungworm, *Dictyocaulus viviparus*; and thread-like worm, *Setaria labiato papillosa*.

MATERIALS AND METHODS

Strains of organisms used in studying the relation between *Pasteurella bovisseptica* and enzootic bronchopneumonia were secured by culturing diseased lung tissue of calves that died or were killed during acute or chronic stages of the infection. Other strains were secured by aspirating secretions from the nasopharyngeal region of calves during various stages of pneumonia. *P. bovisseptica* was isolated from these secretions by inoculating laboratory animals and by plate cultures. Other strains were obtained by culturing the heart blood of laboratory animals which received injections of edematous tracheal exudate and minced portions of affected lung tissue of calves that died of enzootic bronchopneumonia. After isolation of the various strains of *P. bovisseptica* the organisms were grown and maintained under conditions which have been described in a previous