The efficacy of the three compounds Niclosamide (Yomesan), Oxfendazole (Systamex), Praziguantel (Droncit) were tested against immature and mature poultry tapeworm Raillietina tetragona. All experiments were conducted using the controlled test of Moskey and Harwood (1941). This test has been advocated to be the most reliable for screening the anathematic activity of drugs. Niclosamide at 100 mg/kg b.wt caused only destrobilation of the immature and mature worms. However, the intact scolices would regenerate another body within 7-10 days. Thus, Niclosamide is unsatisfactory for radical treatment of poultry tapeworm. Oxfendazole was tried for the first time against poultry cestodes. The minimal dose of the drug which produced 100% efficacy against immature R. tetragona in chicken was 10 mg/kg, where the same effect on mature forms was 7.5 mg/kg. Lower doses than 10 mg/kg produced very variable effects against immature forms, whereas doses higher than 10 mg/kg eliminated all worms. Mature worms, however, responded to a lesser variable degree when exposed to doses lower than 7.5 mg/kg. No report before our present studies is available on the efficacy of Praziquantel against poultry cestodes. In this study, it was found that, both immature and mature worms were completely killed by Praziguantel at all doses tested, i.e. 10, 7.5, 5 and 2.5 mg/kg b.wt.