EFFECTS OF p-NONYLPHENOL ON THE IMMUNE ORGANS IN THE JAPANESE QUAIL

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We attempted to observe the effects of p-nonylphenol (NP) on the immune organs such as the bursa of Fabricius, spleen and thymus in male Japanese quail. Three doses of NP (10, 100, 1000 ng/g body weight) were injected intraperitonially every 2 days. Control birds were injected an equal volume (200 μl) of peanut oil similarly. The birds were kept in short photoperiod (8L16D) from 4 weeks to 7 weeks after hatching. As the result, the bursa weight and body weight were dose dependently suppressed by NP administration. In the bursa, lymphoid follicles increased in 10 ng/g body weight NP treated birds, lobules became small and the number of lobules in all NP-treated groups decreased. However, the empty spaces found in the bursa of estradiol treated quail (Razia et al.) were not induced by NP treatment. Spleen and thymus weights did not show significant differences among groups, while the empty spaces were found in the thymus.