Preliminary results on the effects of aircraft spray of Fenitrothion on breeding success and body condition of nestlings

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This study was conducted to comprehend the impact of aircraft spray of Fenitrothion on breeding success and body condition of nestlings of forest-dwelling birds. Pine forests had been treated with Fenitrothion against the infection of *Bursaphelenchus Xylophililus* during two years in experimental areas. We prepared 10 artificial nests at experimental and control areas in February 2004, respectively. Densities of canopy and bush-dwelling insects showed no significant difference in two areas. Number of birds and density were high in experimental area before and after aircraft spray. Body condition of nestlings also did not show significant difference between two areas. But, breeding success and clutch size were high in control area, and volume indices of eggs were high in experimental area. These results did not show evident effects of aircraft spray of Fenitrothion on birds. However, these results suggest the necessity of study on the difference of foraging efficiency of birds after aircraft spray and long-term effects of Fenitrothion on body condition of nestlings.