

Charter 4

Airborne Spraying Based on GPS

1. Spraying in Guangxi based on GPS

In order to effectively prevent and cure the forest insects and diseases, we have developed the aerial prevention and control system based on light plane and made an experiment in Guangxi Zhuang Autonomous Region. 24 and 48 hours after aerial spraying, we investigated the number of living and dead insects on sample trees in 5 forest regions. We mainly checked the number of dead insect under the crown and calculated the effect of prevention and controlling. After investigation of 5 forest regions, we found that there are 200-400 dead insects under the crown and very few living insects on the sample trees, even zero on some individual trees. It showed that fog drop subsided equably, little areas during spraying are neglected and the rate of killing insect is beyond 99%. The practice demonstrates that this system is feasible in preventing and controlling forest diseases and insects in forest region. This technology is applied in practice in Guangxi Zhuang Autonomous Region and Anhui Province, China.

The worker is planing flight line (see Fig.4.1). And we use light plane to spraying (Fig.4.2) .

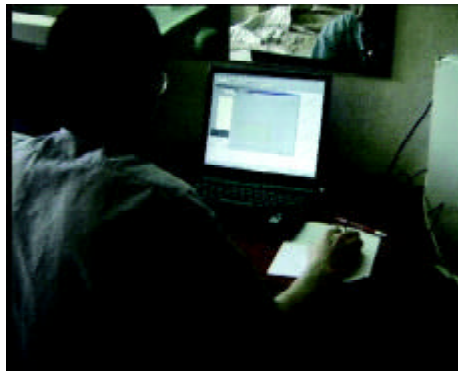


Fig.4.1 Planning flight lines before spraying

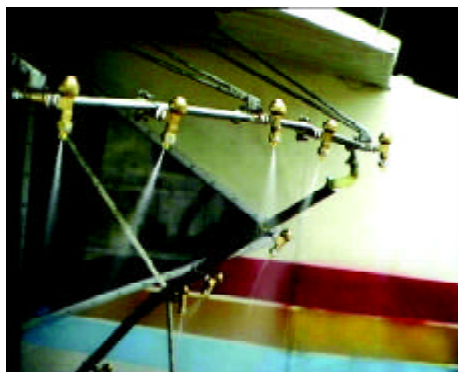


Fig. 4.2 Airborne high efficiency spraying system

In summary, with social and technological development, the protection of limited forest resources and ecology has drawn wide attention among most countries. As an important means in monitoring and protection of forest resources, airborne remote sensing technology should be improved greatly.

2. Acknowledgments

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