

**COOPERATIVE EXTENSION SERVICE**

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January 21, 2004

Mr. Richard Getzkow
TREE WORLD
4466 Stalashen Drive
Sechelt, BC, VON 3A1

Dear Richard:

The following information provides documentation as to the spray study conducted at a hardwood nursery near St. Francisville, Louisiana in which Plantskydd animal repellent was used. The nursery chosen for this study was "Hardwood Seedlings, LLP" owned by Irv and Edward Daniel, P.O. Box 459, St. Francisville, La. 70775 (www.hardwoodnursery.com).

The nursery had experienced tremendous damage on tupelo gum (*Nyssa aquatica*) seedlings soon after seeds germinated and above ground growth began for several consecutive years leading up to the 2003 study. White-tailed deer browsed these seedlings so extensively that the majority of the seedlings failed to reach adequate heights for sale and distribution.

On July 9, 2003 a study was initiated in which two separate spray mixtures of Plantskydd were applied down a prepared nursery bed of tupelo gum seedlings that were approximately 2 months old. These seedlings had been experiencing serious browse damage by white-tailed deer up to the treatment date. The seedlings were growing on a 5-foot wide bed that was approximately 250 feet in length. One half of the 5-foot wide bed was treated with a mixture of 2.2 lbs. of Plantskydd in 2 gallons of water for a distance of 100 feet down the length of the bed. For the next 100 feet of bed length, seedlings on the same side of the 5-foot wide bed were treated with a mixture of 2.2 lbs. of Plantskydd in one gallon of water. The remaining 50 feet of the 5-foot wide bed was left as an untreated check just as the untreated 2 ½ -foot side adjacent to the treated portion of the bed.

The two-gallon spray mixture was the recommended spray rate for applying Plantskydd repellent to deciduous trees in leaf. Experimental protocol called for this spray rate; along with a doubling of the recommended spray rate (2.2 lbs of Plantskydd in one gallon of water) to test the longevity of each mixture as a viable repellent for white-tailed deer on this highly preferred nursery species.



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Test results revealed that both spray mixtures controlled browsing by white-tailed deer. In addition, none of the treated or untreated portions of the bed experienced further browse damage for a period of 6-weeks post spray treatment. After approximately 6-weeks, treated and untreated portions of the bed began to experience slight browsing pressure. No further spraying was necessary as the seedlings had reached a height where the browsing they were experiencing did not deter their further development up until lifting from the beds.

Although test results were inclusive as to the true effectiveness of each Plantskydd spray mixture on suppressing browsing pressure, speculations can be made that the treated and untreated areas were in such close proximity to each other that the entire area was effectively protected from browsing damage. Each spray mixture could possibly have acted as an area repellent, preventing deer from utilizing any seedlings on the entire bed.

Follow-up tests will involve applying various mixtures to a portion of the nursery bed in an area located a considerable distance away from an untreated portion of the bed. This methodology should reveal the true effectiveness of Plantskydd in serving as a deterrent to deer browsing in this particular nursery situation.

Please contact me if you desire any further information on this completed work and I also invite your input into any further experimental designs that can be implemented in order to determine the effectiveness of Plantskydd as a repellent on white-tailed deer in these and other forestry situations.

Regards:

Don Reed Ph.D.
Associate Professor
LSU Ag Center

Cc: Mr. Edward Daniel, Hardwood Seedlings, LLP

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