# **Plantskydd Deer Repellent** Effective for deer, elk, rabbits and moose!

Plantskydd® Deer Repellent is the browse deterrent of choice for leading North American forest companies who use it to successfully prevent plantation damage by deer, rabbits, elk and moose to millions of conifer and hardwood trees, including: cedar, spruce, fir, pine, alder, birch, larch, and poplar species. Many customers have provided positive anecdotal feedback as to the effectiveness of Plantskydd in protecting plants against other herbivores (plant eating mamals).

**Nurseries** and **landscapers** find Plantskydd® Deer Repellent to be equally effective in protecting flowers, shrubs, and ornamentals.

### What makes it effective?

Plantskydd Deer Repellent works by emitting an odor that animals associate with predator activity, repelling the animal before it nibbles on plants. The odor is not unpleasant to the applicator.

Research has proven that odor-based repellents are more effective than other repellent systems- where the animal needs to taste treated plants before being repelled. Once animals are attracted to an area and begin feeding, it is more difficult to discourage them from returning. Plantskydd stimulates a fear-based response which will have them looking for somewhere else to dine. Which repellents actually work?

Plantskydd's long-term effectiveness is attributable to the tenacity of its 100% natural, vegetable oil binder in sticking to plants, even under severe snow/rainfall conditions: up to 6 months over winter, 3-4 months in summer.

## **Plantskydd's Development**

Plantskydd® Deer Repellent was first developed in Sweden in 1991 in response to commercial forest plantations being decimated by deer, moose and rabbits. The forest industry needed an animal repellent that could last through severe weather and meet Sweden's strict environmental laws.

Plantskydd's effectiveness as a long lasting animal browse repellent was substantiated in Field Trials 1991-1994 and the results published in the Scandinavian Journal of Forest Research - J. Berquist & G. Olander, Swedish University of Agricultural Sciences - ASA Forest Research Station, 1996.

#### 100% Natural

Plantskydd powder concentrate is listed by the Organic Material Review Institute (OMRI) for use in production of organic food and fibre.



Plantskydd is exempt from federal EPA (Environmental Protection Agency) pesticide registration. Plantskydd contains

no synthetic additives, is non-toxic and is not harmful to animals, plants or the environment. The 'active' ingredient is dried bloodmeal — recognized by the EPA as an environmentally safe ingredient.

In the United States, \*bloodmeal\* is an EPA (Environmental Protection Agency) exempted product/minimum risk pesticide and is exempt from the Federal Insecticide, Fungicide, and Rodenticide Act requirements, specifically under Section 25(b) c.f. Federal Register, 61(45), Mar. 6, 1996 and therefore is not subject to federal registration.

"The EPA has determined ... that the use of these pesticides poses insignificant risks to human health or the environment ... "The Agency in promulgating this rule, is responding to society's increasing demand for more natural and benign methods of pest control ... " May 6, 1996 USA – EPA

**In Canada and the United States**, Plantskydd's effectiveness as an animal browse deterrent has been confirmed since 1994 in *Operational Level Field Trials* undertaken by large forest industry Cooperators on millions of conifer and deciduous trees of various species. It is now considered the most cost-effective and environmentally safe animal browse deterrent available and is used by leading forest companies, nurseries, private woodlot owners, landscapers, home gardeners, as well as State/Provincial and Federal Conservation agencies. Available in either soluble powder, pre-mix or granular formulation, Plantskydd repels: deer, elk, moose, rabbits and opossum by means of odor - which is not offensive to either applicators or planters either during or after plant treatment.

#### Which repellents actually work?

"...Studies investigating trends in efficacy of deer repellents indicate that, of the 20 products tested, repellents with active ingredients that emitted sulfurous odors i.e.: bloodmeal or egg solids, generally provided the best results..."

"...Products that contained active ingredients which cause pain/irritation (capsaicin, allyl isothiocyanate), or illness (thiram) were less effective..."

"...Products that use a bitter taste (denatonium benzoate) were usually the least effective in reducing damage by herbivores. Repellents that were applied to plant surfaces were generally more effective than capsules or other devices that produced an odor intended to protect a specific area."

Conference Proceedings<Advances and Challenges in Forest Regeneration, *June 1-2, 2000* Dr. Dale Nolte, Dr. Kim Wagner, **USDA/APHIS** National Wildlife Research Center, Olympia, WA

#### **Fertilizing Effects**

As an added benefit, Plantskydd Deer Repellent acts as a foliar feed fertilizer for many types of plants. Bloodmeal, Plantskydd's active ingredient, has long been recognized as an organic fertilizer. Studies performed by Pennsylvania State University showed that the use of Plantskydd on a variety of flowering plants resulted in a fertilizing effect.

> "All plants tested that were treated with Plantskydd were larger, had more flowers and generally had greener leaves. This response is typical of the response created



#### by an increased level of fertilization."

E. Jay Holcomb, Professor of Floriculture Department of Horticulture, Pennsylvania State University