



## Corn Gluten Meal

pre-emergent weed control

### Fact Sheet

Dr. Nick Christians of Iowa State University began a research project in 1985 using corn gluten meal. His experiments led to the development and acceptance of a natural product for pre-emergence weed control using 100% corn gluten meal.

#### How does it work?

The gluten meal in Nature's Guide Corn Gluten Meal inhibits root formation of germinating seeds. Without roots the plants cannot get water and die.

#### What is it?

Corn gluten meal is a by product of corn processing. It is a completely natural residual product with a content of 9% nitrogen. Nitrogen is a valuable plant nutrient responsible for the vivid green color of healthy plants. Because it is all natural the nitrogen in Nature's Guide® Corn Gluten Meal is released slowly over a longer period of time. Corn gluten meal is produced as a fine yellow powder, Nature's Guide Corn Gluten Meal or Nature's Guide Corn Gluten Spreadable for easy application.

#### Which weeds does it work on?

Twenty-two weed species have been screened for susceptibility to corn gluten meal: black medic, black nightshade, buckhorn plantain, catchweed, bedstraw, common lambsquarter, curly dock, dandelion, purslane, redroot pigweed, velvetleaf, annual bluegrass, barnyard grass, creeping bentgrass, giant foxtail, large crabgrass, orchardgrass, quackgrass, shattercane, smooth crabgrass, wooly cupgrass, and yellow foxtail. Corn gluten meal significantly reduced plant survival, shoot length and root development of all tested species.

#### How is it applied?

Corn gluten meal is applied at the rate of 20lbs per 1,000 square feet at this rate it reduced crabgrass by 58% at the end of the first year and 85% at the end of the second year, and 91% at the end of year three. Dandelion infestation was nearly eliminated in plots treated at rates above 20 lbs. per 1,000 square feet in the second and third years of the study.

Corn gluten meal does not have any post emergence effect on weeds. For optimum control of weeds apply Nature's Guide® Corn Gluten Meal a few weeks before germination. It should be watered thoroughly in absence of rainfall followed by several dry days to allow plants without roots to die before irrigation.