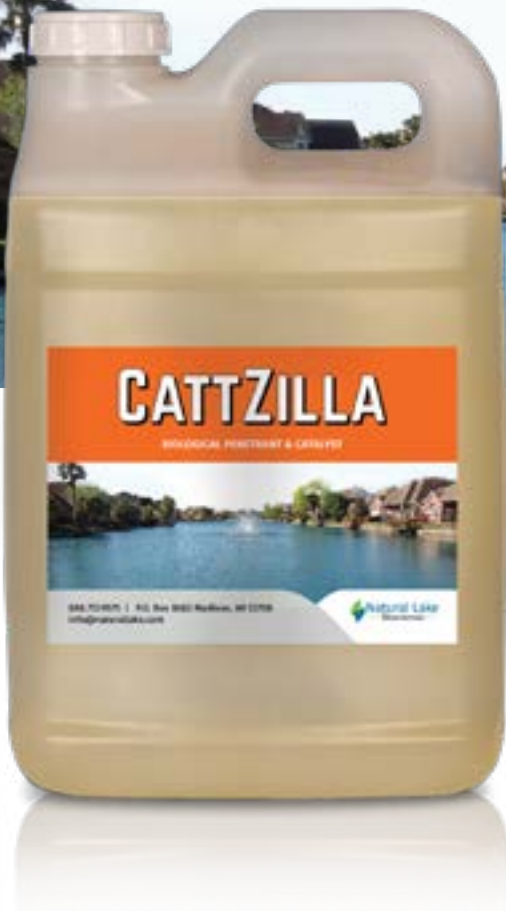


CATTZILLA

BIOLOGICAL PENETRANT & CATALYST



CattZilla is a biological penetrant and catalyst that improves herbicide efficacy and decomposition of dead plant matter. The blend of enzymes, bacterial cultures and fungi enhance cellular penetration of herbicides in cattails by accelerating biochemical reactions. CattZilla then facilitates the breakdown of the dead shoots and stalks. Utilizing CattZilla ensures a more efficient and thorough treatment process while reducing the environmental impact and need of more follow up herbicide applications or labor intensive physical removal.

CattZilla is a liquid formulation that mixes well with most aquatic herbicide formulations (glyphosate, imazamox, imazapyr, etc.). It should be mixed thoroughly in the herbicide solution and applied according to the herbicide instructions.

CattZilla is recommended to be included in treatments on cattails and similar emergent plants

KEY BENEFITS & HIGHLIGHTS

- Biological penetrator and catalyst
- Speeds biochemical reactions and penetration into plants
- Breaks down dead stalks and shoots on a cellular level
- For use on cattails and similar emergent plants

CattZilla Increases Glyphosate Penetration in Cattail Tissues

TURNAGE ET. AL., 2022. EFFECTS OF BIOCATALYSTS ON CATTAIL TREATMENT. MISSISSIPPI STATE UNIVERSITY. PLANT AND SOIL SCIENCES.

Dose Rate

WHEN MIXED WITH ALGAECIDE/HERBICIDE

Mix directly with herbicide and follow herbicide rate and instructions. Do not mix directly with peroxide based algaecides.

Available Sizes

- 1 gallon bottle
- 2.5 gallon jug
- 55 gallon drum
- 275 gallon tote



Based on Treatment Area

1,000 sq ft	1 Surface Acre
12-16 oz	4-6 gal

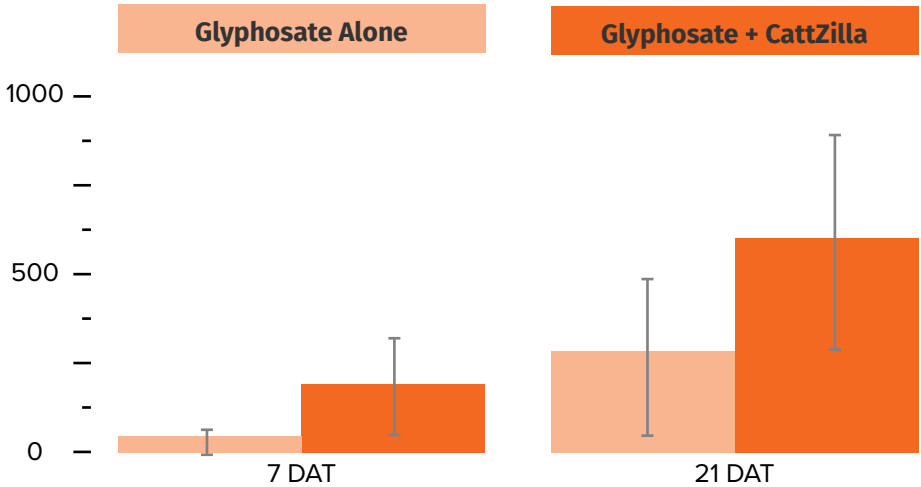
Based on Herbicide Amount

1 gallon	50 gallons
8-16 oz	3-6 gal

Study Highlights

- HPLC analysis: CattZilla increased glyphosate penetration into cattail tissues
- Microscopy analysis: significantly more chlorosis (lack of chlorophyll or damage) in the glyphosate + CattZilla + AquaSticker treatment
- Increased cattail mortality observed at 21 and 28 days in comparison to glyphosate control (about 97% mortality vs 90% mortality)
- Significantly lower live leaf height for cattails treated with CattZilla and CattZilla + AquaSticker. This indicates cattails beginning to fall over at a faster rate (21-35 days vs 42 days for all cattail living leaves to be knocked down)

Mean Glyphosate Concentration 7 & 21 Days After Treatment



**CattZilla
+
Glyphosate**
increased penetration
by
270%
Over glyphosate alone
at the root
7 DAT

[Read the full study here](#)



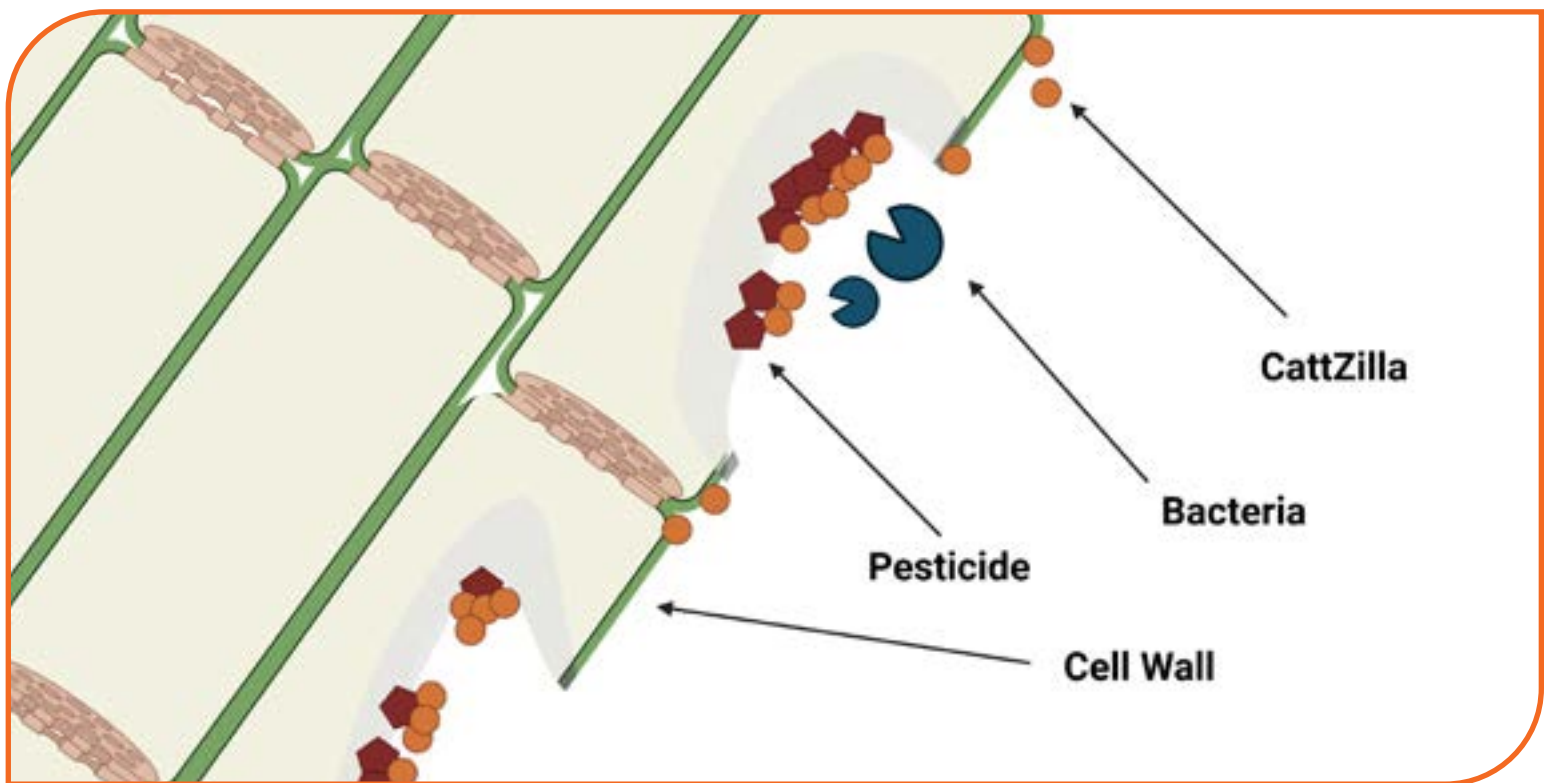
Professional Tip

Cattzilla should be applied with a pesticide on the initial application for best results.

888.757.9575 | www.NaturalLake.com | orders@NaturalLake.com

The Science Behind It

Cattails are supported by a rigid cellular framework that allows them to grow up to 20 feet tall and withstand both wind and gravity. This cellular framework is made of complex proteins, carbohydrates, fatty acids, and minerals. In early spring, carbohydrates stored in the rhizomes are converted to energy for shoot growth. In addition, Cattails have a well-developed aerenchyma that allows for gas to exchange aerobically from the leaves to the roots. Even standing dead cattails will support this gas exchange and contribute to new growth.



When cattails are green and in full bloom, excess carbohydrates are returned through the rhizomes to the root system for storage. Herbicide applications (glyphosate, imazapyr, imazamox) are used at this time until the first frost to get the most benefit of this translocation process. CattZilla works synergistically with the aquatic herbicide to speed penetration and enhance the degradation of the cattail's dead cellular framework. When the supporting framework weakens, the dead cattails will fall and disrupt the gas exchange through the aerenchyma. After the cattails fall, CattZilla promotes continued degradation of the stalks and rhizomes.

NOTE: CattZilla DOES NOT kill aquatic plants or algae