

Outline for

**“UNDERSTANDING ROUNDUP HERBICIDE: WHAT THE CCA SHOULD KNOW ABOUT
GLYPHOSATE BEHAVIOR IN PLANTS, SOILS, AND WATER”**

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I. Introduction

What should the CCA know about the world’s most used herbicide?
Why is this worth knowing?

II. Keys to understanding glyphosate behavior:

- A. The molecule
- B. Overview of the physical and chemical properties of glyphosate

III. Glyphosate Behavior in Plants

- A. Entry into plant cuticles and cells
- B. Mode of Action
- C. Site of Action
- D. The shikimate pathway
- E. Plant metabolism of glyphosate

IV. Glyphosate Behavior in Soil

- A. Adsorption to soil
- B. Degradation rates and products in soil
- C. Potential impacts on microorganisms

V. Glyphosate Behavior in Water

- A. Reactions with light
- B. Degradation rates and products in water
- C. Potential impacts on other plants and aquatic organisms

VI. Summary