

The present invention discloses a method for controlling undesired vegetation at a plant cultivation site. The method comprises the steps of providing, at said site, a plant that comprises at least one nucleic acid comprising a nucleotide sequence en-coding a wild-type or a mutated protoporphyrinogen oxidase (PPO) which is resistant or tolerant to a benzoxazinone-derivative herbicide by applying to said site an effective amount of said herbicide. The invention further discloses plants comprising wild-type or mutated PPO enzymes, and methods of obtaining such plants.