

Nano Green Pesticide, an innovative approach

Soltane sabrine*, Benmeddour Tarek ²

¹Department of Nature and Life Sciences;Laboratory of Genetic, Biotechnology and Valorization of Bioresources,University of Mohamed khider Biskra, Algeria.,

²Department of Nature and Life Sciences;Laboratory of Genetic, Biotechnology and Valorization of Bioresources,University of Mohamed khider Biskra, Algeria.,

sabrine.soltane@univ-biskra.dz

Abstract – Agricultural researchers are adopting the green nanotechnology approach to protect the environment, human health and safe guard plants, and control pests by using nanomaterials, bioactive pesticidal ingredients can be deployed in a more effective leading to better pest control; also cost effective; this innovative solution offers novel ways to protect crops. This article helps in understanding how green nanotechnology can be used as pesticides, and how it improve environmental sustainability.

Green nanoparticles has many benefits, but also with some challenges; according to many studies, the nano green pesticide dissolves more easily in water, simplifying its application to crops.

Nanoenabled pesticides have been shown to be much more effective in controlling agricultural pests while also reducing the use of chemical pesticides needed for crop protection.

Finally, controlling particles size, shape, and chemical properties is crucial for the development of green nanopesticides more sustainable and safe.

Keywords – Nano-Particles, Green Nanotechnology, Crop Protection, Nano Green Pesticide, Sustainable Agriculture, Environment, Advantages and Disadvantages.