

Categorization of pesticides essays examples

[Environment](#), [Nature](#)



Dear fellow Gardeners,

Pesticide application is essential to increase yields from various crops per unit area. Noticeably, most gardeners fail to adapt prevention measures and this necessitates pesticide application to avoid damage by pests that can decrease yields. Normally, there are two types of pesticides; that is, synthetic and natural/organic pesticides. Certainly, it is pertinent for all gardeners to understand the advantages of natural and synthetic pesticides in order to choose their best option.

Quite a number of gardeners experiences early blight of tomato. Specifically, early blight of tomato is a disease that affects leaves, fruits and stems. The disease also causes the tomato fruit to rot near the stem in late fall. Its main cause is the fungus *Alternaria solani* and sometimes it infects the eggplant. It is easier to note early tomato blight since it appears on older leaves in form of irregularly shaped brown spots with concentric rings (Delahaut & Stevenson, 2004). Eventually, the spots increase in size, causing leaves to turn brown and drop. Available control measures include prevention, companion planting, crop rotation, crop combination, tiling and pesticide application. Our aim is to exploit the pesticide control measure and find the most efficient between the two types available.

Pesticides are available in two categories i. e. the natural type and the synthetic one. Synthetic pesticides are manmade chemicals that gardeners can apply to prevent pests from attacking their crops (Eldridge, 2008). The advantages of synthetic pesticides include higher crop yields and promotion of higher crop quality. In addition, application of pesticides enhances the gardeners' capacity to provide enough food for a larger population of

consumers and reduces labor costs resulting in cheaper products (Schreinemachers, Sringarm & Sirijinda, 2011). On the other hand, disadvantages include, harmful chemical residues contaminating crop products, soils and ground water, over time, crop pest populations resistant to synthetic pests develop and healthy risks (EPA H&R, 2014). On the other hand, naturally occurring pesticides are advantageous because they are safe for the user, provide higher crop yields and are less harmful to the environment (Dubey et. al, 2010). Natural pesticides have one major disadvantage; that is, they are not specific. They have the effect of repelling or killing beneficial insects. Based on the aforementioned comparisons, a knowledgeable gardener should prefer natural/botanical pesticides to synthetic/chemical pesticides.

Although I prefer natural pesticides to synthetic pesticides, not all organic pesticides merit. In essence, an organic pesticide needs to be selective in the sense that it is not toxic to non-target organisms like animals and human beings. In addition, the organic pesticide should be easily decomposable (non-persistent effect on the environment), have zero negative effects on soil microorganisms or soil health. Similarly, the organic pesticides must not result in contaminating the environment during the substance manufacturing process. Organic pesticides are naturally occurring pesticides while pesticides allowed in organic farming refer to those particular types of organic pesticides that meet the aforementioned requirements.

The government of a given country through an authorized authority regulates pesticides. In the U. S., the Environmental Protection Agency (EPA) that studies pesticides to determine their risks to the environment and

human beings carries pesticide regulation. It sets the limits of pesticide usage.

Pesticide registration is a legal, administrative and scientific process that examines the pesticide ingredients; specific crops to apply on; frequency, timing and application rate, the disposal and storage practices. The legal authority evaluates pesticides together with detailed submitted reports before authorizing usage of those pesticides (EPA PR, 2014).

References

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