

---

## A REVIEW STUDY ON PEST CONTROL IN ORGANIC SYSTEMS

**Shakuli Saxena\***

\*Assistant Professor,  
Department of Agricultural Sciences,  
Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, INDIA  
Email id: shakuli2803@gmail.com

**DOI: 10.5958/2249-7307.2021.00049.9**

---

### ABSTRACT

*In comparison to conventional farming, organic farmers have fewer choices for managing pests and illnesses in their crops due to organic farming laws. Major pests, on the other hand, may be controlled by manipulating agro ecosystem processes to the benefit of crops and to the detriment of pests. Because of the restricted number of active plant protection chemicals approved for use in organic farming, natural and biological control agents may assist in pest and disease suppression. Traditional agriculture techniques used in recent decades have had unfavorable effects on environmental sustainability, including soil erosion, ecological system degradation, changing the balance between beneficial and harmful pests, and heavy metal and pesticide contamination of soil, water, and agricultural products. As a result, employing synthetic pesticides for pest management is banned in organic agriculture, emphasizing the importance of variety. The study offers the reader with a wealth of practical information that is well-documented and helpful to academics and farmers all around the globe. In organic agriculture, pest management may be achieved via both preventative and curative measures, but contemporary agriculture must prioritize prevention.*

**KEYWORDS:** Agriculture, Organic Agriculture, Pest Control, Preventive, Pesticides.

---

### REFERENCES:

1. V. Stoleru and V. M. Sellitto, "Pest Control in Organic Systems," in *Integrated Pest Management (IPM): Environmentally Sound Pest Management*, 2016.
2. L. Muneret *et al.*, "Evidence that organic farming promotes pest control," *Nat. Sustain.*, 2018, doi: 10.1038/s41893-018-0102-4.
3. P. K. Baidoo, M. B. Mochiah, and K. Apusiga, "Onion as a Pest Control Intercrop in Organic Cabbage (*Brassica oleracea*) Production System in Ghana," *Sustain. Agric. Res.*, 2012, doi: 10.5539/sar.v1n1p36.
4. L. Pfiffner, H.-J. Scharer, and H. Luka, "Functional biodiversity to improve pest control in organic cropping systems," *orgprints.org*, 2007.
5. E. Rööös *et al.*, "Risks and opportunities of increasing yields in organic farming. A review," *Agronomy for Sustainable Development*. 2018, doi: 10.1007/s13593-018-0489-3.
6. M. P. D. Garratt *et al.*, "Enhancing Soil Organic Matter as a Route to the Ecological Intensification of European Arable Systems," *Ecosystems*, 2018, doi: 10.1007/s10021-018-0228-2.
7. H. Sandhu, S. Wratten, R. Costanza, J. Pretty, J. R. Porter, and J. Reganold, "Significance and value of non-traded ecosystem services on farmland," *PeerJ*, 2015, doi: 10.7717/peerj.762.

8. D. Thiéry *et al.*, “Biological protection against grape berry moths. A review,” *Agronomy for Sustainable Development*. 2018, doi: 10.1007/s13593-018-0493-7.
9. E. G. Murrell, “Can agricultural practices that mitigate or improve crop resilience to climate change also manage crop pests?,” *Current Opinion in Insect Science*. 2017, doi: 10.1016/j.cois.2017.07.008.
10. U. Gozel and C. Gozel, “Entomopathogenic Nematodes in Pest Management,” in *Integrated Pest Management (IPM): Environmentally Sound Pest Management*, 2016.
11. A. Rusch, L. Delbac, L. Muneret, and D. Thiéry, “Organic farming and host density affect parasitism rates of tortricid moths in vineyards,” *Agric. Ecosyst. Environ.*, 2015, doi: 10.1016/j.agee.2015.08.019.