Environmental problems limit the future food production. Contrary to traditional agriculture and organic farming, industrialized agriculture adversely impacts the environment. Therefore, shift to a more sustainable agriculture is required. Crops could be protected from pests more sustainably, using integrated pest management (IPM) through sharply cut pesticide use, a mix of cultivation techniques and biological pest controls. IPM considers and evaluates crops and their pests as part of an ecological system. Sustainable forms of food production will significantly reduce the harmful environmental impacts of current systems. Organic farming is a component of sustainable agriculture. Organic farming is a farming method that aims to work in harmony with nature rather than against it. In organic farming the primary strategy in controlling pests and diseases is prevention through good plant nutrition and management. It increases long-term fertility of the soil, as well as controlling pests, diseases and weeds without harming the environment. It excludes or strictly limits the use of synthetic fertilizers and synthetic pesticides, plant growth regulators. It relies more on the use of crop residue extracts and animal waste, microbial decomposition to supply the needed plant nutrients and biological protection against pest and disease.