Annexure I: Glossary

Abiotic Factor. A nonliving component of the environment, such as soil, nutrients, temperature, or moisture.

Action Threshold. This basically refers to the point when a pest becomes a problem that must be dealt with right away to prevent it becoming an even bigger problem.

Active Ingredient. This is the ingredient/s found in a pest control product that produces the toxic effect.

Afforestation. The conversion from other land uses into forest, or the increase in the canopy cover to above the 10% threshold.

Agricultural Biodiversity. The component of biodiversity that is relevant to food and agriculture production. The term agrobiodiversity encompasses genetic species and ecosystem diversity.

Agricultural Intensification. Refers to any practice that increases productivity per unit of land area at some cost in labor or capital inputs.

Agro-Ecology. In general, it has three meanings or forms related to the application of ecology to agricultural systems: (1) a scientific discipline, (2) an agricultural practice, and (3) a social movement. While there are many different definitions, one of the broadest definitions is “the integrative study of the ecology of the entire food system, encompassing ecological, economic and social dimensions.” Alternatively, agro-ecology refers to “the study of purely ecological phenomena within the crop field, such as predator/prey relations, or crop/weed competition. Agro-ecology often incorporates ideas about a more environmentally and socially sensitive approach to agriculture, one that focuses not only on production, but also on the ecological sustainability of the productive system and goes well beyond the limits of the agricultural field.”

Agro-Ecosystem. A relatively artificial ecosystem in an agricultural field, pasture, or orchard.

Agro-Forestry. Collective term for land-use systems and technologies in which woody perennials are deliberately used on the same land management unit as agricultural crops and/or animals, in some form of either spatial arrangement or temporal sequence.
Allelopathy. The suppression of plant growth by chemicals produced by other plants or microbes.

Alley Farming (Cropping). It is an agro-forestry practice that consists in planting perennial trees or shrubs on the sides of crops.

Alternative Agriculture (Agricultura Alternativa). Agricultural approach that attempts to provide a balanced environment, sustained yields, and soil fertility, and natural pest control through the design of diversified agro-ecosystems and the use of self-sustaining technologies, based on ecological principles.

Antagonists. Organisms that release toxins or otherwise change conditions so that activity or growth of other organisms (especially pests) is reduced.

Arthropod. Any insect, crustacean, or spider having jointed appendages and segmented body.

*Bacillus thuringiensis* (Bt). A bacterium that causes disease in many insects, especially caterpillars; formulations of the bacteria are used as insecticides.

Beneficial Insects. Some insects that provide a benefit to crop production: (1) plant reproduction (pollinators), (2) waste biodegradations (decomposers), and (3) natural resistance of agro-ecosystems/natural control of harmful species (natural enemies, predators, and parasitoids).

Biodiversity. The variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within and among species and diversity within and among ecosystems.

Biological Control. The action of parasitoids, predators, or pathogens in maintaining another organism’s population density at a lower average level than would occur in their absence. Biological control may occur naturally in the field or result from manipulation or introduction of biological control agents by people.

Biomass. The total mass of living organisms in a given area or volume; recently dead plant material is often included as dead biomass.

Biorational. Having a minimal disruptive influence upon the environment and its inhabitants (e.g., a biorational insecticide).

Biotic. Living organisms that make up the biotic parts of ecosystems.

Biotic Disease. Disease caused by a pathogen, such as a bacterium, fungus, mycoplasma, or virus.

Biotype. A strain of a species that has certain biological characters separating it from other individuals of that species.

Broadcast Application. The application of a material such as fertilizer or herbicide to the entire surface of a field.

Broad-Spectrum Pesticide. A pesticide that kills a large number of unrelated species.

Burn-Down Herbicide. A nonselective herbicide used to kill all plants in the application area.

Carbon Sequestration. The process of increasing the carbon content of a carbon reservoir other than through the atmosphere.

Caterpillar. The larva of a butterfly, moth, sawfly, or scorpion fly.
Certified Seed or Planting Stock. Seeds, tubers, or young plants certified by a recognized authority to be free of or to contain less than a minimum number of specified pests or pathogens.

Chemical Pest Control. Using either synthetic or natural derivative pesticides.

Climate Change. Climate change refers to any long-term trends in climate over many years or decades, around which climate variability may be evident year on year. Hence, a single warmer or cooler year on its own is not sufficient evidence to assert that climate is changing, but systematic changes in average conditions over many years do provide evidence of a changing climate. The United Nations Framework Convention on Climate Change (UNFCCC) defined climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.” The UNFCCC thus makes a distinction between climate change attributable to human activities altering the atmospheric composition and climate variability attributable to natural causes.

Companion Planting. The practice of planting certain plant species – often herbs – in close association with crop plants to repel pests.

Competition. Interaction between individuals, brought about by a shared requirement for a resource and leading to a reduction in the survivorship, growth, and/or reproduction of at least some of the competing individuals concerned.

Composting. Natural process of “rotting” or decomposition of organic matter by microorganisms under controlled conditions.

Conservation. Any biological control practice designed to protect and maintain populations of existing natural enemies.

Conservation Agriculture (CA). Conservation agriculture aims to achieve sustainable and profitable agriculture and subsequently aims at improved livelihoods of farmers through the application of the three CA principles: minimal soil disturbance, permanent soil cover, and crop rotations. To do so, it promotes no-tillage to safeguard soil biodiversity, uses several organic fertilization practices such as rotations and mulching, but allows the use of genetically modified organisms (GMOs) and chemical inputs, namely pesticides.

Conservation-Tillage Farming. It is a practice used to reduce the effects of tillage on soil erosion; however, it still depends on tillage as the structure-forming element in the soil.

Cover Crops. Cultivation of a second type of crop primarily to improve the production system for a primary crop; examples include grasses or legumes maintained in orchards or vineyards and legume or other crops grown during the winter season to improve soil condition.

Crop Diversification. Crop diversification refers to varied crop associations and/or rotations (involving annual and/or perennial crops including trees). Crop diversification is intended to give a wider choice in the production of a variety of crops in a given area so as to expand production-related activities on various crops and also to lessen risks. Crop diversification is generally viewed as a shift from traditionally grown less remunerative crops to more remunerative crops.
Crop Residue. The part of the crop plants that remain in the field after harvest.

Crop Rotations. The practice of alternating the species or families of annual and/or biannual crops grown on a specific field in a planned pattern or sequence so as to break weed, pest, and disease cycles, and to maintain or improve soil fertility and organic matter content.

Cultivar. A specially developed agricultural plant variety.

Cultural Control. Pest management practices that rely upon manipulation of the cropping environment (e.g., cultivation of weeds harboring insect pests).

Damping-Off. Destruction of seedlings by one or a combination of pathogens that weaken the stem or root.

Deforestation. The conversion of forest to another land use or the long-term reduction of tree canopy cover below the 10% threshold.

Density. In pest control terms, density refers to the number of pests within a certain specific area.

Direct Seeding. Planting directly into untilled soils, without seedbed preparation.

Disease. Any disturbance of a plant that interferes with its normal structure, function, or economic value.

Disturbance. A cause, a physical force, agent, or process, causing a perturbation in an ecological component or system, relative to a specific reference state and system, defined by specific characteristics.

Drip Irrigation. Technique for achieving a low-rate, high-frequency, or long-duration water delivery through pipes to drip nozzles located near the plants.

Dwarfing. A stunting of normal growth characterized in plants by smaller-than-normal leaves and stems.

Ecology. The study of an organism’s interrelationship with its environment.

Ecological Intensification. Ecological intensification refers to maximization of primary production per unit area without compromising the ability of the system to sustain its productive capacity. This entails management practices that optimize nutrient and energy flows and use local resources, including horizontal combinations (such as multiple cropping systems or polycultures), vertical combinations (such as agro-forestry), spatial integration (such as crop-livestock or crop-fish systems), and temporal combinations (rotations). A further definition is the following: an alternative approach for mainstream agriculture to meet current challenges. Ecological intensification aims to match or augment yield levels while minimizing negative impacts on the environment and ensuing negative feedbacks on agricultural productivity, by integrating the management of ecosystem services delivered by biodiversity into crop production systems.

Ecosystem Health. A measure of the stability and sustainability of ecosystem function or ecosystem services that depends on an ecosystem being active and maintaining its organization, autonomy, and resilience over time.

Ecosystem Services. The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and pest control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services such as nutrient cycling that maintain the conditions for life on Earth.
Economic Threshold. A level of pest population or damage at which the cost of control action equals the crop value gained from control action.

Ecosystem. The interactive system formed from all living organisms and their abiotic (physical and chemical) environment within a given area. Ecosystems cover a hierarchy of spatial scales and can comprise the entire globe, biomes at the continental scale, or small, well-circumscribed systems such as a small pond.

Ectoparasite. A parasite that lives on the outside of its host.

Endoparasite. A parasite that lives inside its host.


Entomopathogenic. An organism that attacks insects.

Erosion. The process of removal and transport of soil and rock by weathering, mass wasting, and the action of streams, glaciers, waves, winds, and underground water.

Evapotranspiration. The loss of soil moisture due to evaporation from the soil surface and transpiration by plants.

Extrafloral Nectary. A nectary located outside the flower.

Fallow. Cultivated land that is allowed to lie dormant, with no crops growing on it, during a growing season.

Farmer Field School (FFS). FFS refers to group-based learning methodology that has been used by a number of governments, NGOs, and international agencies to promote integrated pest management. It brings together concepts and methods from agro-ecology, experiential education, and community development.

Field Capacity. The moisture level in soil after saturation and runoff.

Food Security. Situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Fumigation. Treatment with a pesticide active ingredient that is a gas under treatment conditions.

Fungus (Plural: Fungi). Any of numerous plants lacking chlorophyll, ranging in form from a single cell to a body of branched filaments. Includes yeasts, molds, smuts, and mushrooms.

Gall. Localized swelling or outgrowth of plant tissue often formed in response to the action of a pathogen or other pest.

Gene. A biochemical unit of hereditary, often coding for an entire protein.

Genetic Engineering. The manipulation of the genetic material of an organism in order to achieve desirable characteristics.

Genetically Modified Organism (GMO). Organism in which the genetic material has been changed through modern biotechnology in a way that does not occur naturally by multiplication and/or natural recombination (e.g., a plant may be given Bt genetic material that increases its resistance to pest).

Green Manuring. The cover crop grown to help maintain soil organic matter and increase nitrogen availability.

Green Bridge. Crop plant volunteers and weeds growing out of season that provides an environment for carryover and buildup of crop diseases and insects.
Ground Cover. Any of various low- and dense-growing plants used for covering the ground, as in places where it is difficult to grow grass.

Habitat. The particular environment or place where an organism or species tend to live, a more locally circumscribed portion of the total environment.

Habitat Manipulation. Manipulation of agricultural areas and surrounding environment with the aim of conserving or augmenting populations of natural enemies (e.g., the planting of a refuge for natural enemies).

Herbicide. A pesticide used to control weeds.

High-Residue Farming. An umbrella term that covers cropping systems where the volume of the soil that is tilled is reduced in order to maintain residue cover of the soil.

Honeydew. The sugary liquid discharge from the anus of certain insects (Homoptera) such as aphids and scales.

Host. The host is the organism that a parasite lives on or in. For example, if a plant has a pest, the plant is the host and the pest is the parasite.

Host Plant Resistance. The relative amount of heritable qualities possessed by a plant that reduces the degree of damage to the plant by a pest or pests.

Immune. Exempt from infection by a given pathogen.

Incorporate. To mix a material such as crop residue/organic matter into the soil by mechanical action.

Indigenous. The opposite of exotic, meaning it is native to a certain area.

Infection. The entry of a pathogen into a host and establishment of the pathogen as a parasite of the host.

Infestation. The presence of a large number of pest organisms in an area or field, on the surface of a host or anything that might contact a host, or in the soil.

Inoculum. Any part or stage of a pathogen, such as spores or virus particles, that can infect a host.

Inorganic. Containing no carbon; generally used to indicate materials (e.g., fertilizers) that are of mineral origin.

Integrated Pest Management (IPM). A pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as encouraging biological control, use of resistant varieties, and adoption of alternate cultural practices such as modification of irrigation or pruning to make the habitat less conducive to pest development. Pesticides are used only when careful monitoring indicates they are needed according to preestablished guidelines and treatment thresholds, or to prevent pests from significantly interfering with the purposes for which plants are being grown.

Intensification. Intensification in conventional agriculture is understood primarily as using a higher input of nutrient elements and of pesticides per land unit. It also means more energy (direct for machinery and indirect for inputs).

Intercropping. Growing two or more crops as a mixture in the same field at the same time.

Juvenile. Immature form of a nematode/insect that hatches from an egg and molts several times before becoming an adult.
**Land Cover.** The physical coverage of land, usually expressed in terms of vegetation cover or lack of it that is influenced by land use.

**Landscape.** Landscape is an area of land that contains a mosaic of ecosystems, including human-dominated ecosystems.

**Larva (Plural: Larvae).** The immature form of insects/nematodes that develops through the process of complete metamorphosis including egg, several larval stages, and adult. In mites, the first-stage immature is also called a larva.

**Lepidopterous.** Of or pertaining to the Order Lepidoptera, the moths and butterflies.

**Living Mulch.** A cover crop that is interplanted with the primary crop(s) during the growing season.

**Mechanical Control.** Using screens, traps, or other mechanical means to control pests.

**Microbial Pesticides.** Pesticides that consist of bacteria, fungi, viruses, or other microorganisms used for the control of weeds, invertebrates, or plant pathogens.

**Microorganism.** An organism of microscopic size, such as a bacterium, virus, fungus, viroid, or mycoplasma.

**Mite.** Tiny, actually minute organisms that belong to the phylum Arthropoda, class Arachnida.

**Modification of Environmental Factors.** Factors such as moisture and heat, and, in the case of certain organic materials that decay, to gradually improve soil quality. Plant derived in organic or synthetic materials may be used.

**Monitoring.** Carefully watching and recording information on the activities, growth, development, and abundance of organisms or other factors on a regular basis over a period of time, often utilizing very specific procedures.

**Monoculture.** This refers to a cultivation system in which a single crop species covers a plot of land.

**Mosaics.** Mosaics are evident at all scales from submicroscopic to the planet and universe. All mosaics are composed of spatial elements (patches, corridors, and matrix). Those at the landscape scale are commonly called landscape elements, and those at the regional scale are landscapes.

**Mulch.** A layer of material placed on the soil surface to prevent weed growth/conserv soil moisture.

**Multiple Cropping Systems.** Planting two or more species in the same field during the same growing season is multiple cropping systems. It can take the form of double-cropping, in which a second crop is planted after the first has been harvested, or relay cropping, in which the second crop is started amid the first crop before it has been harvested.

**Mycorrhizae.** Beneficial associations between plant roots and fungi.

**Natural Control.** The suppression of pest populations by naturally occurring biological and environmental agents.

**Natural Enemies.** Predators, parasitoids, or pathogens that are considered beneficial because they attack and kill organisms that we normally consider to be pests.

**Natural Selection.** The process by which adaptive traits increase in frequency in a population due to the differential reproductive success of the individuals that possess the traits.
Necrosis. Death of tissue accompanied by dark brown discoloration, usually occurring in a well-defined part of a plant, such as the portion of a leaf between leaf veins or the xylem or phloem in a stem or tuber.

Nectar. The sugary liquid secreted by many flowers.

Nectary. A gland that secretes nectar.

Nematode. A triploblastic, bilaterally symmetrical, unsegmented, pseudocoelomate, and vermiform animal parasitic in animals, insects, or plants, or free-living in soil or water.

Niche (Ecological). All of the interactions of a species with the other members of its community including competition, predation, parasitism, and mutualism are niche. A variety of abiotic factors, such as soil type and climate, also define a species’ niche. Each of the various species that constitute a community occupies its own ecological niche.

Nonpersistent Virus. A virus that is carried on the mouthparts of its insect vector and is lost after the vector feeds once or a few times, stylet-borne virus.

Organic. A material (e.g., pesticide) whose molecules contain carbon and hydrogen atoms. Also may refer to plants or animals which are grown without the use of synthetic fertilizers or pesticides.

Organic Agriculture. Holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity, is organic agriculture. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems.

Organic Matter. Plant and animal residues at various stages of decomposition, cells and tissues of soil organisms, and substances synthesized by the soil population.

Overwinter. A period of rest or hibernation by which insects survive the winter.

Oviposition. The laying or depositing of eggs.

Parasite. An organism that derives its food from the body of another organism, the host, without killing the host directly; also an insect that spends its immature stages in the body of a host that dies just before the parasite emerges (this type is also called a parasitoid).

Parasitoid. An animal that feeds in or on another living animal, consuming all or most of its tissues and eventually killing it.

Participatory Plant Breeding. Farmers participate in the selection of parent materials and in on-farm evaluations.

Pathogen. A disease-causing organism.

Perennial. A plant that can live three or more years and flower at least twice.

Persistent Virus. A virus that systemically infects its insect vector and usually is transmitted for the remainder of the vector’s life.

Pest Resurgence. The rapid rebound of a pest population after it has been controlled.

Pesticide. Any substance or mixture intended for preventing, destroying, repelling, killing, or mitigating problems caused by any insects, rodents, weeds, nematodes, fungi, or other pests.
**Pesticide Resistance.** The genetically acquired ability of an organism to survive a pesticide application at doses that once killed most individuals of the same species.

**Pheromone.** A substance secreted by an organism to affect the behavior or development of other members of the same species; sex pheromones that attract the opposite sex for mating is used in monitoring certain insects.

**Photosynthesis.** The process by which plants convert sunlight into energy.

**Phytotoxicity.** The ability of a material such as a pesticide or fertilizer to cause injury to plants.

**Plant Genetic Resources.** Inter- and intra-specific diversity of crops, varieties, and related wild species which are central to agricultural development and improvements.

**Polyculture.** Complex form of intercropping in which a large number of different plants maturing at different times are planted together.

**Pollinator.** The agent of pollen transfer, usually bees.

**Postemergence Herbicide.** Herbicide applied after the emergence of weeds.

**Predator.** Any animal (including insects and mites) that kills other animals (prey) and feeds on them.

**Preemergence Herbicide.** Herbicide applied before emergence of weeds.

**Primary Inoculum.** The initial source of a pathogen that starts disease development in a given location.

**Protectant Fungicide.** Fungicide that protects a plant from infection by a pathogen.

**Quarantine.** A period of enforced isolation that is required to prevent movement of undesirable organisms.

**Reduced-Till.** Reduced-till systems are somewhat similar to mulch till in that they involve full-width tillage, use the same implements, and may use one to three tillage trips. Reduced-till, however, leaves 15–30% residue on the soil surface after planting. Weed control is accomplished with crop protection products and/or row cultivation.

**Relay Cropping.** Cropping systems in which two or more crops are grown in sequence in the same field in the same year, with little or no overlap in time. Not a true form of polyculture because very little interspecies interaction usually occurs in these systems.

**Residue Management.** Management of crop straw and stubble after harvest.

**Resistant.** Able to tolerate conditions (such as pesticide sprays or pest damage) harmful to other strains of the same species.

**Resurgence.** This refers to a return of pests that were previously controlled. For instance, if you had basically eradicated the pest population on your farm and then they came back, this would constitute resurgence.

**Rogue.** To remove diseased plants from a field.

**Rootstock.** An underground stem or rhizome; lower portion of a graft which develops into the root system.

**Rotation.** The practice of purposefully alternating crop species grown on the same plot of land.
Row Covers. Any fabric or protective covering placed over rows of plants to protect them from pest damage, prevent virus vectors or harsh climate.

Sanitation. Any activity that reduces the spread of pathogen inoculum, such as removal and destruction of infected plant parts, cleaning of tools and field equipment.

Scion. The portion above a graft that becomes the trunk, branch, and tree top; the cultivar or variety.

Selective Herbicide. A herbicide that kills only certain groups of plants, for example, one that kills broadleaf plants but not grasses.

Selective Pesticide. Pesticides that are toxic primarily to the target pest (and perhaps a few related species), leaving most other organisms, including natural enemies, unharmed.

Smallholder. The definition of smallholders differs between countries and between agro-ecological zones. In favorable areas of smallholder subsistence agriculture with high population densities, smallholders often cultivate less than one hectare of land, whereas they may cultivate ten hectares or more in semiarid areas or manage up to ten heads of livestock.

Soil Health. The capacity of soil to function as a living system.

Soil Organic Matter (SOM). Soil organic matter is any material produced originally by living organisms (plant or animal) that is returned to the soil and goes through the decomposition process. At any given time, it consists of a range of materials from the intact original tissues of plants and animals to the substantially decomposed mixture of materials known as humus.

Solarization. The practice of heating soil to levels lethal to pests through application of clear plastic to the soil surface for 4–6 weeks during sunny, warm weather.

Stoma (Plural: Stomata). Natural opening in a leaf surface that serves for gas exchange and water evaporation and has the ability to open and close in response to environmental conditions.

Strip-Till. A system where the soil is tilled and crop residue removed or buried in a 15- to 30-cm wide strip where the next crop will be planted. The residue-covered area between the strips is left undisturbed.

Sucker. Shoot arising from the trunk or rootstock.

Sustainability. A characteristic or state whereby the needs of the present and local population can be met without compromising the ability of future generations or populations in other locations to meet their needs.

Sustainable Development. Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Systemic. Capable of moving throughout a plant or other organism, usually in the vascular system.

Target Pest. A pest species that a control action is intended to destroy.

Tolerance. Inherent lack of susceptibility to a pesticide. Also, the ability of a plant to grow in spite of infection by a pathogen.

Transformed (Bt-Transformed). Transfer and expression of a gene (e.g., for Bt toxin) into another organism.
Transgenic Plants. Transgenic plants are plants possessing a single or multiple genes, transferred from a different species.

Trap Crop. A crop or portion of a crop intended to attract pests so they can be destroyed by treating a relatively small area or by destroying the trap crop and the pests together.

Variety. An identifiable strain within a species, usually referring to a strain which arises in nature as opposed to a cultivar which is specifically bred for particular properties, sometimes used synonymously with cultivar.

Vector. An organism able to transport and transmit a pathogen to a host.

Vegetative. Plant parts or plant growth not involved in the production of seed, such as roots, stems, and leaves.

Virus. A very small organism that can multiply only within living cells of other organisms and is capable of producing disease symptoms in some plants and animals.

Volunteer Crop. The undesired emergence of a significant stand of a self-seeded, previously planted crop in a field purposely planted with another crop.

Weed Seed Bank. The reserve of viable weed seeds present on the soil surface and scattered in the soil profile.

Zero Tillage. No-till farming (sometimes called zero tillage) is a way of growing crops from year to year without disturbing the soil through tillage.

Annexure II: Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF</td>
<td>Agro-Forestry</td>
</tr>
<tr>
<td>AMF</td>
<td>Arbuscular Mycorrhizal Fungi</td>
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<td>ATP</td>
<td>Adenosine Triphosphate</td>
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<td>BPH</td>
<td>Brown Plant Hopper (Rice)</td>
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<td>Bt</td>
<td>Bacillus thuringiensis</td>
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<td>BYDV</td>
<td>Barley Yellow Dwarf Virus</td>
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<td>CA</td>
<td>Conservation Agriculture</td>
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<td>CAP</td>
<td>Common Agricultural Policy</td>
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<tr>
<td>CBC</td>
<td>Conservation Biological Control</td>
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<tr>
<td>CEC</td>
<td>Cation Exchange Capacity</td>
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<tr>
<td>CGMC</td>
<td>Cover/Green Manure Crop</td>
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<tr>
<td>CMV</td>
<td>Cucumber Mosaic Virus</td>
</tr>
<tr>
<td>CP</td>
<td>Coat Protein</td>
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<tr>
<td>CPB</td>
<td>Colorado Potato Beetle</td>
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<tr>
<td>CRM</td>
<td>Crop Residue Management</td>
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<td>DBM</td>
<td>Diamondback Moth</td>
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<td>DADS</td>
<td>Diallyl Disulfide</td>
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<tr>
<td>DAP</td>
<td>Days After Planting</td>
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<td>DAS</td>
<td>Days After Sowing</td>
</tr>
<tr>
<td>DMDS</td>
<td>Dimethyl Disulfide</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
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<td>--------------</td>
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<tr>
<td>DNA</td>
<td>Deoxyribonucleic Acid</td>
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<tr>
<td>ECB</td>
<td>European Corn Borer</td>
</tr>
<tr>
<td>EBPM</td>
<td>Ecologically Based Pest Management</td>
</tr>
<tr>
<td>EPM</td>
<td>Ecological Pest Management</td>
</tr>
<tr>
<td>ET</td>
<td>Ethylene</td>
</tr>
<tr>
<td>ET</td>
<td>Evapotranspiration</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FFS</td>
<td>Farmer Field School</td>
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<tr>
<td>FMV</td>
<td>Feathery Mottle Virus (Sweet Potato)</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<tr>
<td>GIS</td>
<td>Geographic Information Systems</td>
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<tr>
<td>GM</td>
<td>Genetically Modified</td>
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<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>GR</td>
<td>Glyphosate Resistant</td>
</tr>
<tr>
<td>GSL</td>
<td>Glucosinolates</td>
</tr>
<tr>
<td>GUA</td>
<td>Genotype Unit Areas</td>
</tr>
<tr>
<td>HCN</td>
<td>Hydrogen Cyanide</td>
</tr>
<tr>
<td>HIPVs</td>
<td>Herbivore-Induced Plant Volatiles</td>
</tr>
<tr>
<td>HPR</td>
<td>Host Plant Resistance</td>
</tr>
<tr>
<td>HT</td>
<td>Herbicide-Tolerant</td>
</tr>
<tr>
<td>ICIPE</td>
<td>International Center of Insect Physiology and Ecology</td>
</tr>
<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>ITCs</td>
<td>Isothiocyanates</td>
</tr>
<tr>
<td>IWM</td>
<td>Integrated Weed Management</td>
</tr>
<tr>
<td>LER</td>
<td>Land Equivalent Ratio</td>
</tr>
<tr>
<td>LF</td>
<td>Leaf Folder (Rice)</td>
</tr>
<tr>
<td>MB</td>
<td>Methyl Bromide</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MT</td>
<td>Mulch Till</td>
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<td>NPV</td>
<td>Nuclear Polyhedrosis Virus</td>
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<tr>
<td>NSKE</td>
<td>Neem Seed Kernel Extract</td>
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<td>NSPE</td>
<td>Neem Seed Pulverized Extract</td>
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<td>NT</td>
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<tr>
<td>ODP</td>
<td>Oviposition-Deterring Pheromone</td>
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<td>OM</td>
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<td>PCN</td>
<td>Potato Cyst Nematode</td>
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<td>PGPR</td>
<td>Plant Growth-Promoting Rhizobacteria</td>
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<td>PF</td>
<td>Precision Farming</td>
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<td>PLRV</td>
<td>Potato Leaf Roll Virus</td>
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<td>Plum Pox Virus</td>
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<td>PRSV</td>
<td>Papaya Ring Spot Virus</td>
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<td>PSD</td>
<td>Plant Species Diversity</td>
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<td>PTC</td>
<td>Perimeter Trap Cropping</td>
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Annexures
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<tr>
<th>Acronym</th>
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<tr>
<td>PTGS</td>
<td>Posttranscriptional Gene Silencing</td>
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<tr>
<td>PTM</td>
<td>Potato Tuber Moth</td>
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<tr>
<td>PVY</td>
<td>Potato Virus Y</td>
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<tr>
<td>RNA</td>
<td>Ribonucleic Acid</td>
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<tr>
<td>RS</td>
<td>Remote Sensing</td>
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<tr>
<td>RT</td>
<td>Ridge Till</td>
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<tr>
<td>SAR</td>
<td>Systemically Acquired Resistance</td>
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<tr>
<td>SB</td>
<td>Stem Borer (Rice)</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>SI</td>
<td>Sustainable Intensification</td>
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<tr>
<td>SOC</td>
<td>Soil Organic Carbon</td>
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<td>SOD</td>
<td>Superoxide Dismutase</td>
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<td>SOM</td>
<td>Soil Organic Matter</td>
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<tr>
<td>ST</td>
<td>Strip Till</td>
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<tr>
<td>ToMV</td>
<td>Tomato Mosaic Virus</td>
</tr>
<tr>
<td>TSWV</td>
<td>Tomato Spotted Wilt Virus</td>
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<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>VRT</td>
<td>Variable Rate Technology</td>
</tr>
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<td>VOCs</td>
<td>Volatile Organic Compounds</td>
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<td>Watermelon Mosaic Virus</td>
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<td>YM</td>
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<td>ZYMV</td>
<td>Zucchini Yellow Mosaic Virus</td>
</tr>
</tbody>
</table>
Composting, 35, 36
Conservation, 2, 8, 10, 13–26, 77, 155, 166, 171, 287, 313, 315
Conservation agriculture, 2, 8, 77, 166
Conservation biological control, 155
Conservation-tillage farming, 2, 8, 13, 171, 313
Cover crops, 8, 15, 31, 47, 84, 91–103, 111, 119, 166, 203, 214, 231, 274, 313
Cover crops-pest management mechanisms
  enhancing suppressive effects of soil life, 102–103
  extending the length of a crop rotation, 102
  improving soil structure, 102
  providing a physical barrier, 102
Crop diversification, 150, 180
Crop residue, 2, 15–20, 23, 24, 30, 46, 98, 99, 113, 172, 203, 209, 275, 277, 278, 312
Crop rotation, 6, 15, 16, 18, 21–24, 26, 30, 32–34, 36, 46, 47, 93, 102, 156, 166, 174–175, 206, 221, 229–240, 275–276, 299, 313, 316
Crop rotation-agronomic benefits
  breaking pests’ life cycle, 231
  improving soil structure, 231
  supply of nutrients, 231
  timeliness of planting operations, 232
Crop rotation-benefits
  agronomic benefits, 231–232
  environmental benefits, 232
  socio-economic benefits, 232
Crop rotation-environmental benefits
  biodiversity enhancement, 232
  reduced greenhouse gas emissions, 232
  reduced water pollution, 232
Crop rotation-socio-economic benefits
  economic security, 232
  increased margins, 232
  work load distribution, 232
Cultivar mixtures-mechanisms of action
  dilution and barrier effect, 265
  induced resistance, 265
  microclimate modification, 267
Cultural approaches-benefits and constraints
  benefits, 203
  constraints, 203
Cultural approaches-harvesting procedures
  strip harvesting, 210
  timing of harvesting, 210
Cultural approaches-maintenance of site
  crop residue mulching, 209
  destruction of crop residue, 209
  nutrient management, 207
  pruning, defoliation and topping, 207
  sanitation, 208–209
  water management, 207–208
Cultural approaches-planting design
  cover crops, 206
  crop isolation, 204
  crop rotation, 206
  destruction of volunteer plants, 206
  habitat management, 207
  intercropping, 205
  management of alternate hosts, 206
  management of nursery crops, 207
  planting density and spacing, 204–205
  reduced tillage, 207
  timing of seeding and planting, 205–206
  trap crops, 206
Cultural control, 202, 203
D
Deforestation, 77
Direct seeding, 14
Disease, 4, 30, 45, 78, 91, 110, 111, 113, 117–118, 134, 149, 168, 212, 243, 259, 273, 296, 316
Disturbance, 14, 15, 19, 103, 166, 263, 312, 314
Drip irrigation, 208
Dwarfing, 22, 68, 101, 213, 243, 263
E
Ecological intensification, 2, 312, 316–318
Ecology, 3, 213, 297
Economic threshold, 202, 220
Ecosystem health, 7
Ecosystem services, 2, 77, 78, 165, 316
Entomopathogenic, 83, 85
Erosion, 5, 9, 14, 46, 91, 103, 151, 170, 203, 231, 274, 278, 313
Extrafloral nectary, 313
<table>
<thead>
<tr>
<th>Index</th>
<th>337</th>
</tr>
</thead>
</table>
| **F** | Fallow, 9, 82–85, 101, 233, 240  
Field capacity, 45  
Food security, 6, 78, 250, 274, 287  
Fumigation, 275  
Fungus, 38, 83, 85, 250, 254, 284 |
| **G** | Gall, 23, 208, 213  
Gene, 137, 244, 246, 313  
Genetically modified organism (GMO), 2, 137, 244, 250, 253, 254  
Genetic engineering, 137, 244, 250–255, 313, 314, 316  
Green bridge, 22, 24  
Green manuring, 6, 8, 9, 19, 37, 44, 46, 47, 54, 91, 112, 116, 119, 120, 171, 176, 221, 238, 274, 276  
Ground cover, 82, 85, 94–97, 103, 124–127, 250, 277 |
Habitat manipulation, 94  
High residue farming, 14, 30  
Honeydew, 223, 303  
Host, 8, 18, 21, 24, 30, 33, 34, 66, 70, 71, 78, 80, 82, 95, 102, 111, 113, 115, 121, 123, 124, 134, 135, 152–154, 165, 187, 202, 212, 231, 248, 260, 276, 303, 313  
Host plant resistance, 247, 318 |
| **I** | Incorporate, 19, 35, 38, 56, 85, 99, 198, 277, 298, 312  
Indigenous, 166  
Infection, 22, 33, 53, 63, 66, 68, 70, 102, 206, 232, 262, 265, 304  
Inoculum, 22, 25, 33, 92, 113, 123, 174, 205, 208, 244, 262, 265, 286 |
| **M** | Manganese effects on pests diseases, 69  
Mechanical control, 274  
Microbial pesticides, 259  
Microorganism, 9, 20, 30, 33, 34, 38, 46, 56, 236, 274, 317  
Modify environmental factors, 99, 170, 202  
Monitoring, 296, 298, 300–303, 307, 317, 318  
Monoculture, 1, 5, 20, 78, 85, 109, 111, 212, 213, 215, 220, 222, 224, 230, 231, 267, 297  
Mosaics, 65, 67, 206, 245, 250, 253–255, 263, 297  
Mulch, 8, 30–35, 47, 82, 93, 96, 98, 102, 112, 150, 168, 172, 220, 274, 277–279  
Multiple cropping systems, 139  
Mycorrhizae, 245 |
| **N** | Natural control, 230  
Natural enemies, 4, 6–8, 10, 18, 33, 34, 64, 78–82, 84–86, 93, 94, 96, 110–112, 114, 121, 123, 135, 141, 143, 150, 165, 194, 202, 212, 234, 295, 312  
Necrosis, 25 |
Nectar, 80, 94, 112–113, 121, 150, 151, 154, 166, 170, 176–178, 180, 213–215, 219, 223
Nectarine, 62
Niche, 80, 85, 103, 260
Nitrogen effects on pests diseases, 64–66 insect pests, 63–64
Non-Brassica biofumigation crops garlic, 51 grasses, 51 onions, 51
Non-persistent virus, 207

O
Organic agriculture, 312
Overwinter, 18, 94–95, 113, 166, 168, 170, 177–179
Oviposition, 80, 81, 114, 115, 134, 151, 154, 161, 195, 197, 206, 220

P
Parasite, 65, 66, 95, 224
Participatory plant breeding, 7, 143, 243–256, 314, 316
Pathogen, 4, 8, 20, 33–35, 37, 38, 43–46, 51, 53, 62, 63, 65–71, 80–82, 91, 110, 113, 123, 134, 166, 191, 205, 212, 229, 244, 274, 301, 314
Perennial, 3, 9, 10, 16, 26, 30, 77, 78, 80, 82, 175, 223
Persistent virus, 207
Pest resurgence, 312
Pesticide resistance, 141, 202
Pheromone, 140, 143, 151, 167, 193, 198, 305, 307, 314

R
Reduced till, 14, 26 Relay cropping, 110, 114, 120 Residue management, 2, 30–39 Resistance mechanisms to insect pests antibiosis, 248
avoidance or escape, 249
non-preference, 248
tolerance, 249
Resurgence, 297, 312
Rogue, 208
Rootstocks, 30
Rotation, 6, 30, 32–34, 36, 37, 46, 47, 93, 102, 156, 166, 206, 213, 229, 275, 299, 313
Sanitation, 8, 13, 23, 24, 203, 208, 209
Selective herbicide, 17
Selective pesticides, 315
Silicon effects on pests Diseases, 71
Smallholder, 78, 186, 187
Soil health, 4, 6, 13, 78, 210
Soil organic matter (SOM), 9, 13, 16, 31, 91, 229, 232
Solarization, 31, 45, 53, 55–57
Stoma, 66, 280
Strip-till, 14, 234
Sucker, 208
Sulfur effects on pests insect pests, 69 mites, 69
Sustainability, 109, 277, 287, 302, 314, 317
Sustainable development, 2, 317
Systemic, 62, 102, 304

Transgenic herbicide-tolerant crop varieties alfalfa, 255 cotton, 255 maize, 255 soybean, 255
Transgenic insect resistant crop varieties brinjal, 251 corn, 251 cotton, 251 potato, 251 rice, 252, 253 soybean, 251–252
Transgenic plants, 198, 244, 251, 253, 255
Transgenics with combined resistance maize, 255 potato, 255
Trap crop, 6, 47, 85, 97, 98, 110, 133–144, 150, 166, 187, 203, 217, 276
Trap crops-disrupt host location acting as trap plants, 154 attraction of natural enemies, 154 camouflaging or physically block, 153 draw pests away, 152 integration of techniques, 154 masking of host plant odors, 153 repelling pests, 152
Trap crops-insect pest management aphids, 155 caterpillars, 155 leaf hoppers, 156

V
Variety, 4, 8, 22–25, 80, 85, 137, 140, 206, 236, 243–247, 249–253, 255, 260, 262, 267, 276, 287, 297, 301, 313, 314
Vector, 21, 25, 34, 80, 82, 84, 96, 137, 156, 205, 206, 212, 245, 250, 263
Vegetative, 33, 209, 249
Virus, 5, 21, 22, 24, 25, 34, 65, 67, 68, 80, 116, 137, 149, 156, 196, 205, 207, 208, 212, 213, 245, 250, 252–255, 263, 274, 284, 317
Volunteer crop, 17, 26

W
Weed seed bank, 24, 31, 82

Z
Zero tillage, 20