

Agronomic Disorders Definitions

Answer Definitions – Causal Category

Causal Category	Definition	Examples
Biological	Caused by a living organism	Insects, fungus, virus, bacteria, animals, parasitic plants, etc.
Cultural	Caused by a change or shift in routine agricultural traditions, behaviors, or mannerisms	Crop rotation, equipment, farming practices, etc.
Environmental	Caused by a force of nature	Wind, water, temperature, atmospheric conditions, etc.

Answer Definitions – Agents:

Agents	Definition – *seed, vegetative parts, reproductive parts, or end-product
Bacteria (B)	Caused by a bacterial agent. Bacteria are microscopic living organisms that have only one cell
Chemical (Ch)	Damage caused when a plant comes in contact with a natural or manufactured pesticide product
Compaction (Co)	Caused when soil is compacted by some means
Drought (D)	Caused when there is a lack of irrigation or rainfall
Frost damage (Fr)	Caused when temperatures rapidly drop or fall below freezing
Fungus (Fn)	Caused when a crop is affected by a member of any of a kingdom (Fungi) of saprophytic and parasitic spore-producing eukaryotic typically filamentous organisms formerly classified as plants that lack chlorophyll and include molds, rusts, mildews, smuts, mushrooms, and yeasts
Hail (Ha)	Caused by hail damage
Heat (Ht)	Caused by excessive heat
Insect (I)	Caused by damage from an insect. Insects injure plants by chewing leaves, stems, and roots, sucking juices, egg laying or transmitting diseases.
Lightning (L)	Caused by damage from lightning
Mechanical (Me)	Caused by mechanical damage. Mechanical damage occurs when plant parts are crushed, cut, punctured, rubbed, or struck, or otherwise damaged due to accidental or deliberate physical actions due to machine malfunction or improper machine operation
Moisture (Mo)	Caused by overwatering or flooded conditions
Nematodes (Ne)	When a plant is damaged by soil nematodes
Nutritional (Nu)	Symptoms caused by deficiency or toxicity of plant nutrient or the application of a natural or manufactured fertilizer or nutrient .
Pollution (P)	Caused by a form of pollution. Major forms of pollution include air pollution, light pollution, litter, noise pollution, plastic pollution, soil contamination, radioactive contamination, thermal pollution, visual pollution, and water pollution
Sun scald (S)	Damage to plant tissue, especially bark or fruit, caused by exposure to excessive sunlight

Virus (V)	Caused by a viral infection. Viruses multiply only in living cells. They are too small to be seen with a light microscope and are therefore considered to be submicroscopic. Viruses are composed of a nucleic acid (most plant viruses contain ribonucleic acid [RNA]) and are enclosed in a protein coat.
Wind damage(W)	Caused by damage from excessive wind

Answer Definitions and Examples – Plant Part Damaged:

Parts of Plants Displayed	Definition	Examples
Vegetative (Ve)	When the disease or disorder appears on the vegetative part of the plant. Parts of a plant which do not participate in sexual reproduction process are called vegetative parts.	Roots, stems, and leaves, tubers, slips, and bulbs used for planting,
Reproductive (R)	When the disease or disorder appears on the reproductive part of the plant. Parts of a plant which participate in the sexual reproduction process are called reproductive parts.	Flowers, fruits, and seeds and in the field
<small>"Updated term"</small> Value Added Agricultural Commodity (VA)	When the disease or disorder appears on the marketable part of a plant	What will be harvested or sold - Ear of corn, cotton lint, potato tuber, onion, tomato, peanut
More than One (M)	When the disease or disorder appears on more than one (1) part of a plant	Must display the disease or disorder on at least two (2) of the examples above

Further Definitions –

- Damage to the reproductive part of the plant can directly impact the market value of the final product thus leading to damage of the marketed Value Added Agricultural Commodity. If both the reproductive part of the plant and the post-harvest Value Added Agricultural Commodity are displayed as damaged, then the answer is “more than one”.
- If the damage is to the reproductive part of the plant, but the post-harvest end-product / ag commodity is not displayed or displayed as sound, the answer is “reproductive”.
- If only the post-harvest end-product / ag commodity is shown as damaged, the answer is “Value Added Agricultural Commodity”.
- A Value-Added Agricultural Commodity may be displayed separately from the plant in post-harvest form.
- If more than one picture or specimen is used to constitute a given sample. Answer disorder as a complete sample.