

HYPERSENSITIVE RESPONSE (HR)

- Results in **sudden death** of the host cells in the vicinity of the pathogen
- Highest degree of resistance
- Both structural & biochemical in nature
- Common in obligate pathogens like fungi, viruses and nematodes, also found in other fungal & bacterial infection
- Due to HR,
 - the necrotic tissues isolate the obligate pathogen from living cells.
 - **devoid the pathogen of nutrition, thus starves and die.**

INDUCIBLE STRUCTURAL DEFENSE

- The formation of **abscission layers** (left) or **cork layers** (middle) can
 1. limit the size of lesions, and consequently the extent of damage that can be caused by a single infection
 2. Provide protection by inhibiting further spread of pathogen
 3. Block the spread of toxic substances of the pathogen
- The abundant and quick formation of **tyloses** (right) can stop the spread of vascular wilt pathogens

