

RELIANT® Fungicide Mode of Action

RELIANT complex mode of action

RELIANT is a systemic fungicide which has both xylem and phloem mobility, in that it will move systemic throughout all parts of plants. It will move from plant roots into the newly emerging shoots and conversely from new shoots into the root system.

RELIANT is absorbed by all plant tissue regardless of where or how it is applied and is directly fungistatic, in that it slows the growth of the disease pathogen and inhibits the formation of new spores by the pathogen.

When absorbed by the plant RELIANT directly effects plant metabolism by stimulating the production of ATP and ADP along with the defensive response of accumulation of phytoalexins (immune bodies) similar to that in humans. These phytoalexins enhance the activity of the plant's dynamic defense system, causing rapid changes within the cells of lytic enzymes, thickening of cell walls, higher cell pressure and lignification to occur within the cell.

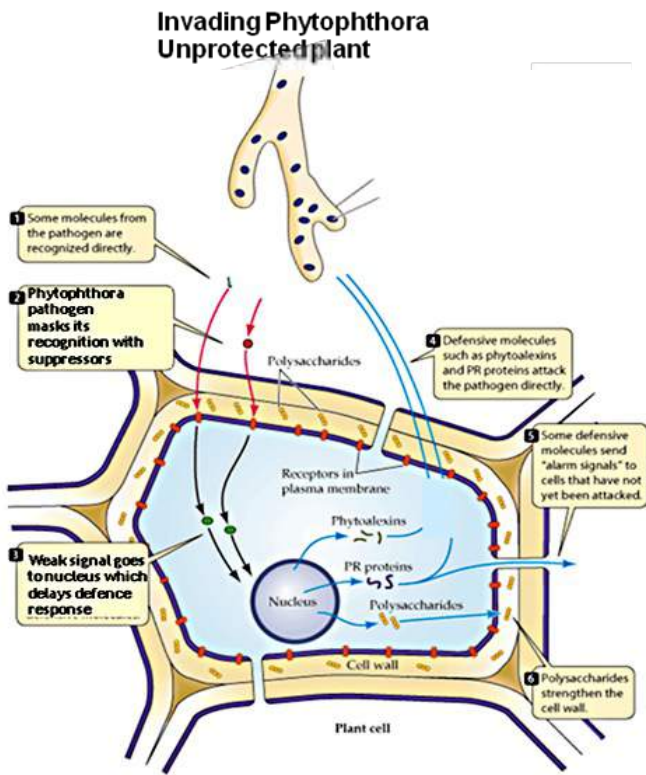
This increase in "plant robustness" is sometimes called "Systemic Acquired Resistance" and can directly off set the onset of pathogen attack. Below is an unprotected cell under pathogen attack.

This very complex mode of action can be simplified into making the plant more "robust healthy, ready to withstand pathogen attack" and environmental stress.

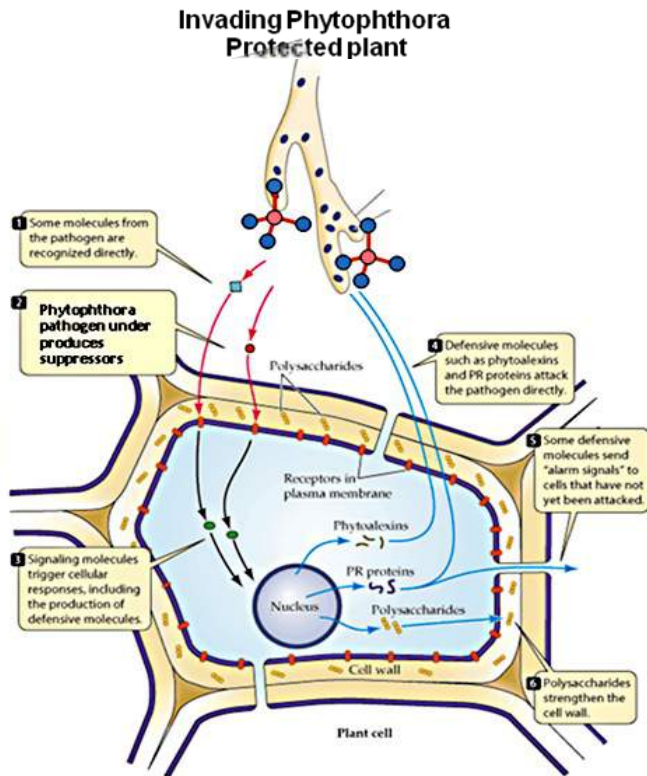
Other physiological effects observed after applications of RELIANT to various plant species are: bigger blooms, increase in color or intensity of color of both leaves and blooms, initiation of root growth, larger fruit set or increase on fruit set, auxiliary bud break and a very pronounced observable overall increase in plant health and vigor. All treated plants will demonstrate one of these effects but not all plants will show all effects.

See graphic illustration back page

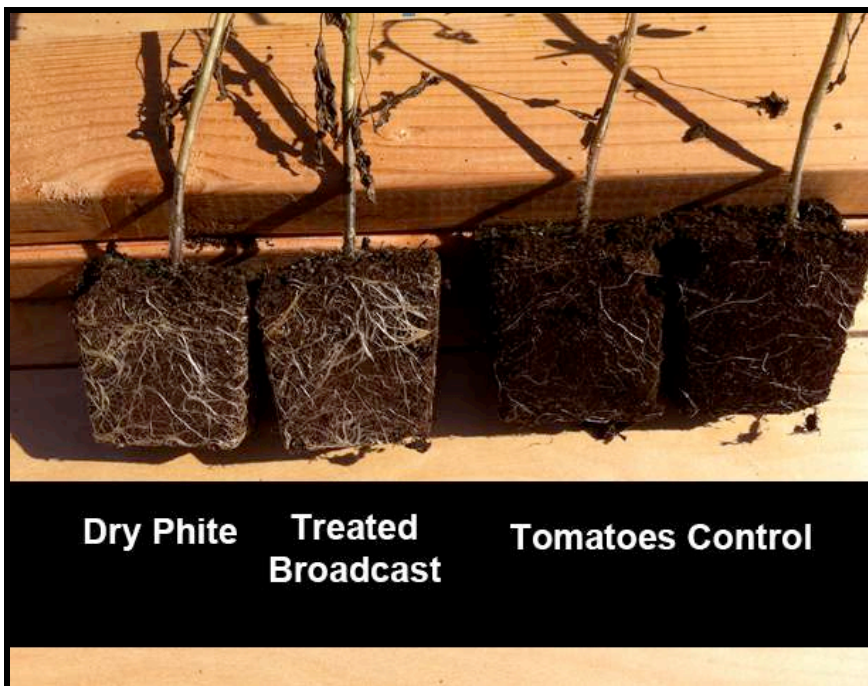
Phytophthora attack without Reliant



Phytophthora attack protected with RELIANT Fungicide



Field Demonstration Evaluation Trial Result on Tomato- *Phytophthora* spp.



11712 230th St
 Linwood, Kansas 66052
 Phone 785-542-2577
 Fax 785-542-2531

www.questproducts.us