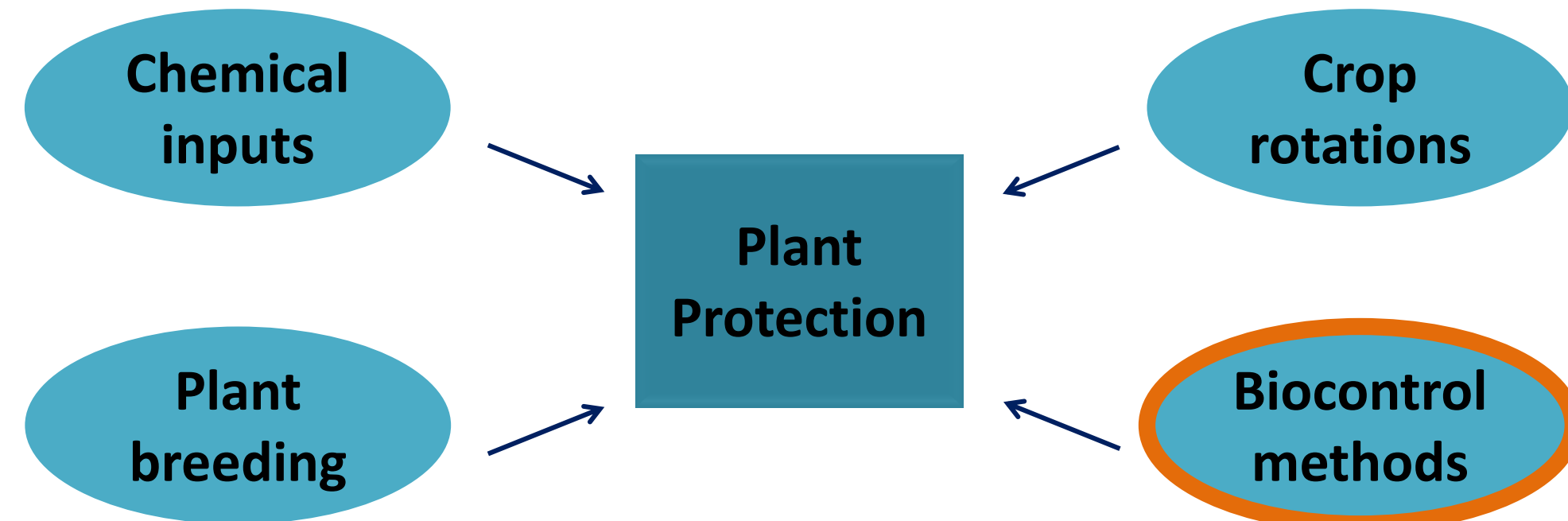


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## CONTEXT



Pest management research has taken into account the increasing concern of society for human health and environmental security. New crop protection strategies are being developed with great focus on **biological control methods**.

**Elicitors** consist of all signals perceived by plants and inducing a defensive reaction. They have been subject to intensive research during the last decade and are considered as one of the most promising tools in agriculture for the **promotion of sustainable agroecosystems**.

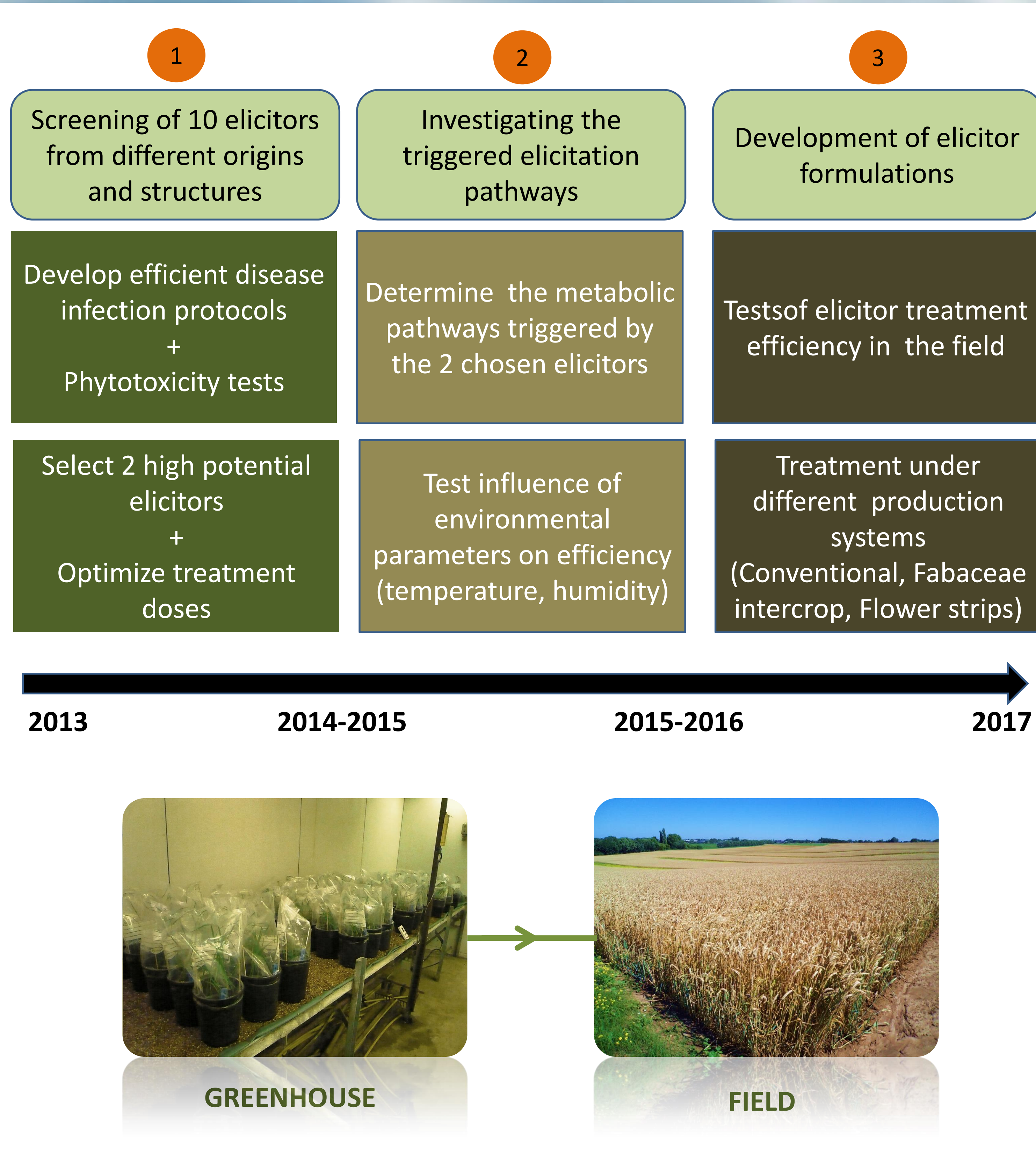
Elicitors from **organic origin** are considered as biological control agents. Although a variable efficiency in field conditions and legislation limitations, this biocontrol agent is of major interest for today and tomorrow's agriculture.

## OBJECTIVES

- Contribute to the **reduction of chemical inputs** in crop systems.
- Contribute to the management of crop residues and pathogenic resistances.
- Few research yet on elicitors for **wheat protection**
- Research carried on **new elicitor candidates** for the preventive protection of wheat against 2 major diseases impacting both its yield and quality:



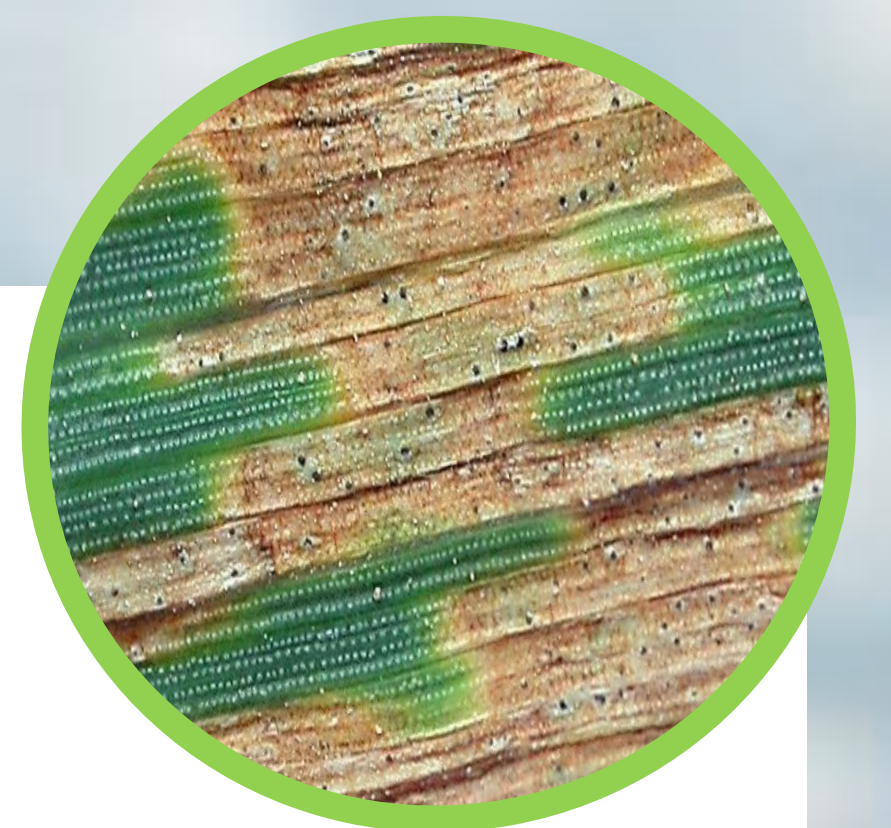
## ELICITOR FORMULATION



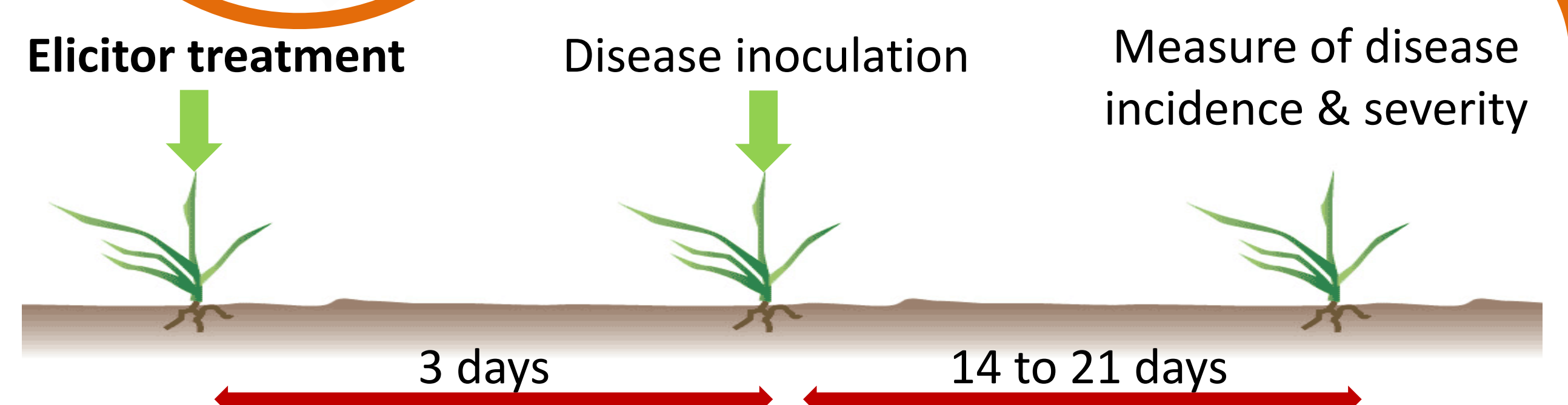
## MEASUREMENTS

### DISEASE SYMPTOM REPRODUCTION

- Disease severity
- Disease incidence
- Greenhouse datalogger (Temperature and Relative Humidity)



### ELICITOR SCREENING



- Measurements every 2 days till 25 days after inoculation
- Plant development stage: 3-4 leaf
- 3 different elicitor concentrations tested
- Treatment and inoculation procedures by leaf spraying

### ELICITATION PATHWAYS

- qRT-PCR measurements
- Focus on elicitation products:
  - PR-proteins
  - Pathogen enzymes
  - Active oxygen species

