# Literature Review

## ~~Biotic a-Biotic Stresses~~

## Robotics

### General Robotics

#### Usage of Robotics

### Robotics in Agriculture

#### Difficulties \ Problems of Robotics in Agriculture

#### Robotics in Orchard \Field

#### Robotics in Greenhouses

#### Disease Detection Robots

###### General Data

###### Detections Methods in Agriculture

###### Weed Disease Detection

### Robotics Manipulators

#### General Robotics Manipulators

###### Manipulator Components

###### Links

###### Joints/DOF – Types of joint

###### Motors and Sensors (internal & External Sensors)

###### End Effector

###### Kinematics

###### DH Notations

###### URDF

###### Forward + Inverse + Differential + Full Kinematics

## Integration Manipulator & Platform

## Path Planning Algorithms

### RRT

### Sampling-based Motion Planning

### Probabilistic Roadmaps (PRM)

### A\*

## Path Control Algorithms & Simulation

### Path Control

#### Visual Servoing

### Simulation

#### Gazeebo

#### Rviz

#### Mathematical

## Optimization

### Optimization Methods

#### MOO

#### Single

#### MOEA

### Manipulators Optimization

### Manipulators Optimization in Agriculture

## Dynamics

### Maximum Loads

### Inertia Moments

### Manipulator Reach effects on the stability of the platform