

## ZeroToxVine

Chemical-Free removal of weeds and pests





### **Pain**

## **Opportunity**

## **Current use of pesticides**



Hazardous to human health



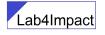
Harm biodiversity and environment



+ 70 % global water use in agriculture

# Secure healthy food for population increase





## **Our Technological Solution**

#### **Detection**

Real time big data

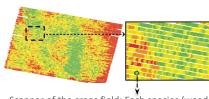
gathering



- Sensors: Picture, Video, GPS/GIS, Weather data, Soil composition, Crop type
- Big data with weeds, pests and crops multi-dimensional patterns

#### **Decision**

Real time processing

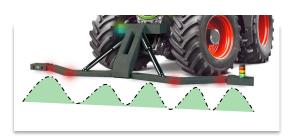


Scanner of the crops field: Each species (weed or pests) are marked with different colour

- · Sensor data analysis
- Comparison to embedded patterns
- Discrimination of weeds and pests
- Decision by machine learning algorithms

#### **Action**

**Removal of Targeted Weeds/Pests** 



- · Instant dehydration by microwaves of targeted harmful weeds and pests
- Down to weed root (5-10 cm in the ground)
- 70 weeds and 12 pests (the most common in Europe)

























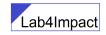




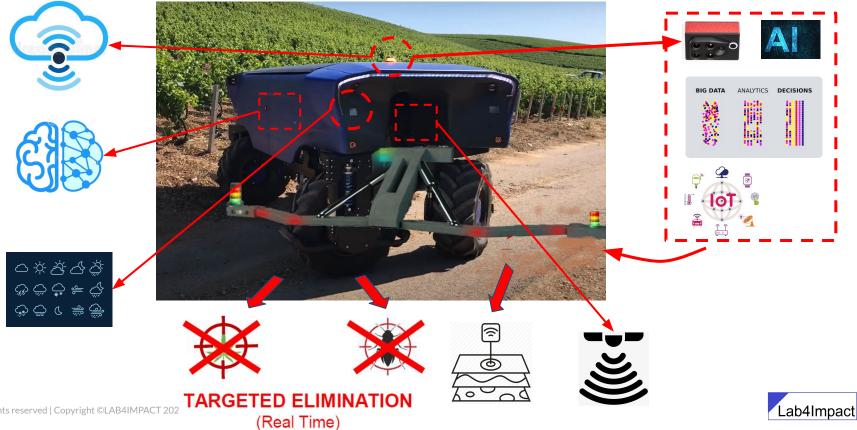


## Value proposition





## PoC's, Infrastructures, Test, Validation..DIH's....



## ZeroToxBot

A real alternative to herbicides and pesticides



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