UAV and autonomous application & monitoring technologies to determinate pests and diseases

Tom Vroegop – October 2021

INTRODUCTION

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OBSERVATIONS IN THE FIELD

KOPPERT BIOLOGICAL SYSTEMS

- Increasing labour costs
- Decrease of labour availability and expertise
- One-man business outdoor farms
- Monitoring and scouting essential for effective biological crop control

DIGITAL SERVICES

KOPPERT BIOLOGICAL SYSTEMS

Monitor

Capture data needed
to follow pest & disease development

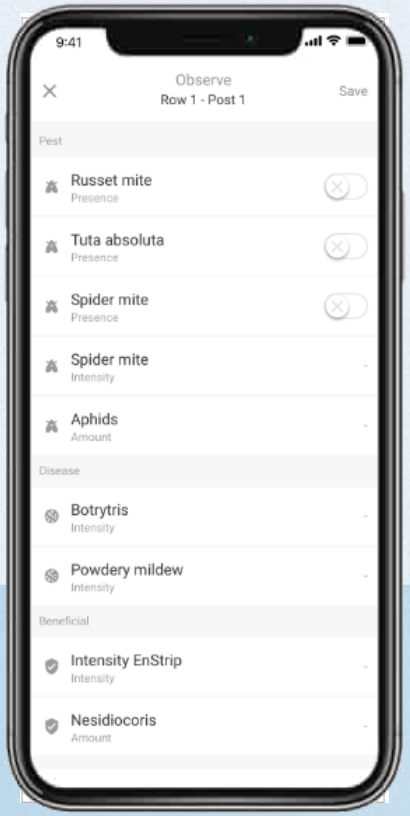
Interpret

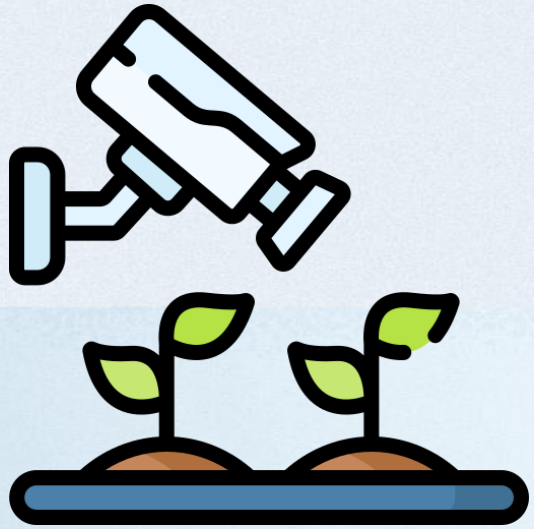
Process aggregated data to determine if and what treatments should be applied.

Action

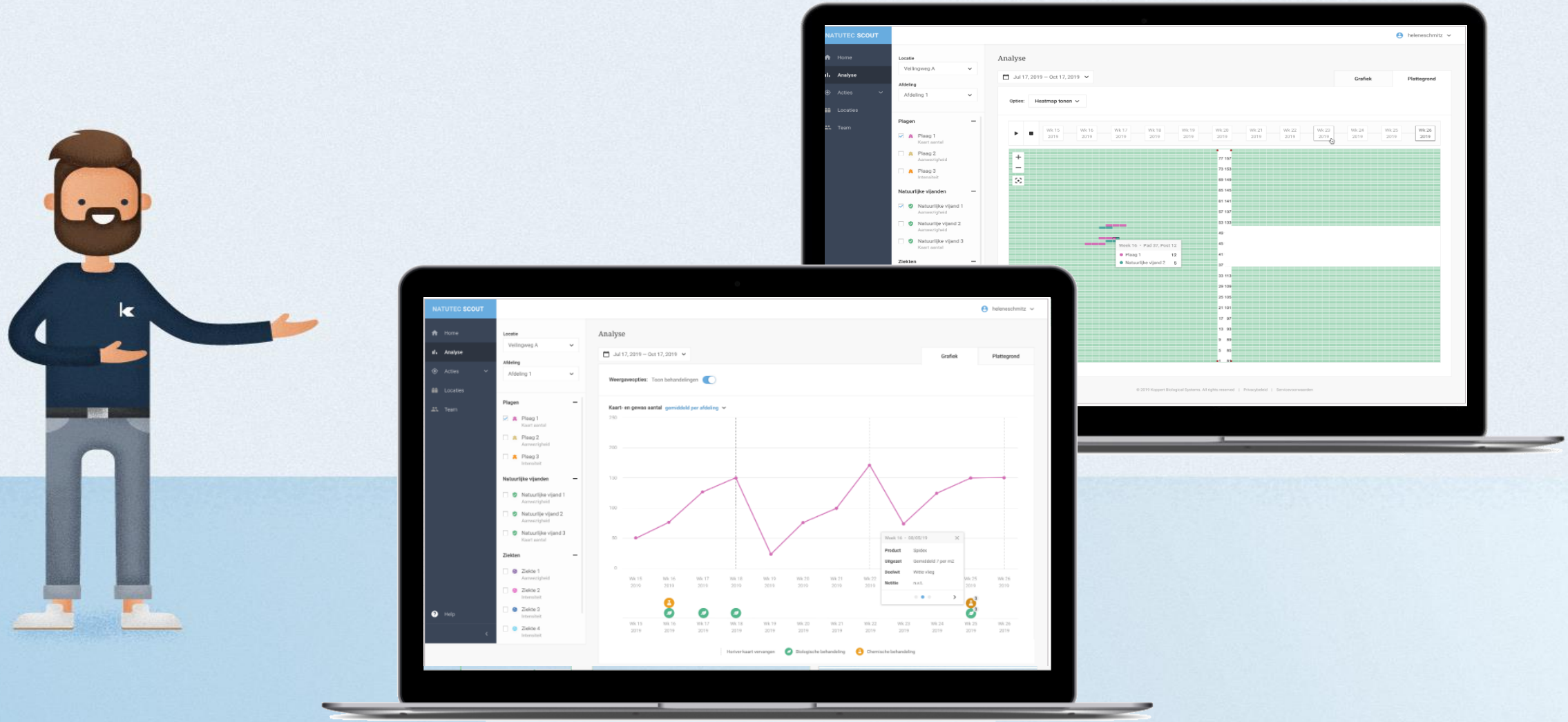
Provide instructions to apply the treatments required based on the interpreted data.

MONITORING: MANUAL, AI SCAN FEATURE AND SENSORING





INTERPRET: NATUTEC SCOUT DASHBOARD



ACTION: NATUTEC DRONE

- Release device for predatory mites and other insects
- In-house development with patent
- Co-creation with UAV engineering company
- Field research has proven biological effectivity and efficiency
- Performance Natutec Drone vs. human farm workers

KOPPERT

BIOLOGICAL SYSTEMS

ACTION: NATUTEC DRIVE

KOPPERT BIOLOGICAL SYSTEMS

FUTURE DEVELOPMENTS

- High tech precision counting of insects
- E-nose
- Hyperspectral and multispectral imaging
- Right timing by data analysis and prediction
- New technologies require new science – new protocols on new data

CLOSING

THANK YOU FOR YOUR ATTENTION

PLEASE VISIT BOOTH NO. 70

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