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Interacting with ISOBUS and CANOpen networks in a robotic context

The application of robotics automation to an agricultural system has required the integration of two different ecosystems, which have developed independently of one another, to meet different needs.



SCORPION PROJECT DEVELOPS SOLUTIONS TO

reduce the use of phytosanitary products in agricultural practice

Improve safety in applications

enhance energy efficiency in the machinery used



HOW DOES THE REDUCTION OF THE USE OF PHYTOSANITARY PRODUCTS ACHIEVED?

TWO MAIN APPROACHES





WHAT TECHNOLOGIES HAVE BEEN USED?







The machinery incorporates sensors that analyze the environment in real time and determine the specific needs of each plant



Precision applicators deposit the treatment only in the required areas of the vine, reducing the use of phytosanitary products without harming the environment



SCORPION ALSO EXPLORES
ALTERNATIVE PEST
PREVENTION TECHNIQUES
THAT DO NOT RELY ON
PESTICIDES

One such technique involves using ultraviolet light to eliminate pathogens





HOW IS AN IMPROVEMENT IN ENERGY EFFICIENCY ACHIEVED?

100% ELECTRIC AUTONOMOUS MOBILITY OF THE WETA SPRAYER

ALL COMPONENTS OF THE SPRAYER ARE DRIVEN BY ELECTRIC COMPONENTS

THE VARIABLE MANAGEMENT AND THE SPEED OF ACTION OF THE ELECTRICAL COMPONENTS



SCORPION ROBOT WETA



TRADITIONAL EQUIPMENT

MAXIMUM CONSUMPTION OF 1.2 KWH (SPRAYER)

WORK CONSUMPTION AROUND 20-25 KWH

















