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NEW ENVIRONMENTALLY FRIENDLY INNOVATION TECHNOLOGY OF CROPS CULTIVATION

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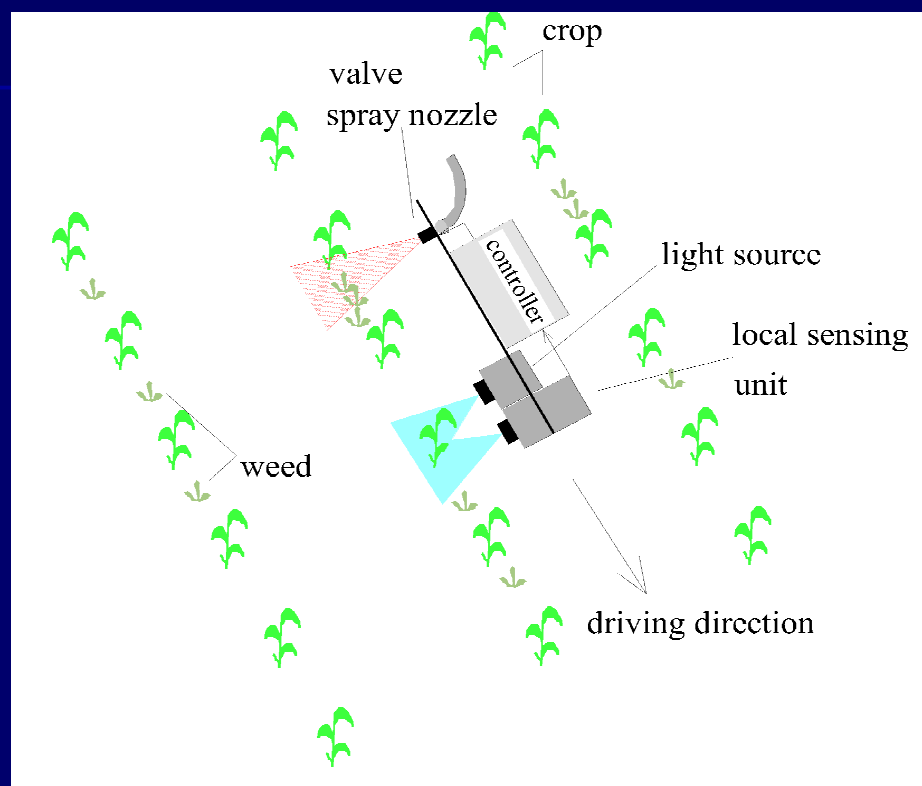


KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

UNIA EUROPEJSKA
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Scheme of technology



Sequence of technology operation for each plant:

1. Obtaining of the reflection spectrum;
2. Recognition of weed;
3. Spraying herbicides if necessary.

Research project aims

- to develop a compact optical recognition device which categorizes plants into two classes and control of valve spray nozzle or work parts of cultivator;
- such controller would work on field conditions in real time;
- to research a possibility of recognition of plants with its categorizing into 3 or more classes.

Proposed technology advantages

- it is resource-saving and provides considerable decrease of ecological influence on the soil, water, atmosphere of the Earth;
- reduction of the herbicide usage and the ecological pressure to the soil, accordingly can reach 50%;
- allows making a non-polluting foodstuff and in future by refusing herbicides usage;
- solve medical and social problems due to the decrease of the number of poisoned people by herbicides;
- reduction of ecological risk and material costs at manufacturing, transportation and storage of these substances;
- technology is patented and has high competitive capacity at world markets.

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