

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Engineering

Evaluation of the Diploma Thesis by Opponent

Thesis Title **The design of the spraying equipment for UAV.**

Name of the student **Saheed Adekunle Ojetimi**

Thesis supervisor **prof. Dr. Ing. František Kumhála**

Department **Department of Agricultural Machines**

Opponent **Ing. Zdeněk Kvíz, Ph.D.**

Theme of the thesis and its significance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formulation of objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choice of appropriate methods and methodology used	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Work with data and information	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall approach and work with data and information	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Theoretical background of an author	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The structure of paragraphs and chapters	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Work with scientific literature (quotations, norms)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skill level of language used	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity and professionalism of expression in the work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formal presentation of the work, the overall impression	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fulfillment of objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Formulation of conclusions	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional contribution of the work and its practical usage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary and key-words comply with the content of the thesis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluation of the work by grade (1, 2, 3, 4)

3

Evaluation: 1 = the best

Date 06/05/2024

el. signed by Ing. Zdeněk Kvíz, Ph.D. *on* 06/05/2024 11:09
Signature of Opponent

Other comments or suggestions:

The Theme of the Diploma Thesis is really up-to-date.

Student wrote the literature review which should be longer and more detailed to describe assigned topic of the thesis.

Text contains some grammatical errors and inaccuracies. I would propose to implement better explanatory pictures to the text.

The thesis does not have a good structure and sometimes is quite chaotic.

In the part, where the student should have proposed its own spraying device for a drone, there are many general information. I would like to see more concrete information and more detailed own technical proposals.

Evaluation and Conclusions part of the thesis do not fulfill the aim and the student's contribution to the assigned topic. I do not find any novelty coming from the student work.

Questions for thesis defence:

1. Describe types of drones which have potential for use in agriculture from the power-drive point of view.
2. What is the biggest pay-load possible for a drone used in agriculture for spraying or fertilizing at the present.
3. How big can be the acreage-performance of a one drone used in agriculture for spraying or fertilizing at the present.
4. Page 22 shows the Figure 4 – it is the part: "Design Proposal of a Spraying Device for a Drone". Why the picture shows two Pumps and further in the text student describes and discuss own proposal with only one Pump?

Date 06/05/2024

el. signed by Ing. Zdeněk Kvíz, Ph.D. on 06/05/2024 11:09
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