



**OCENA ŚRÓDOKRESOWA DOKTORANTA SZKOŁY DOKTORSKIEJ
W UNIwersYTECIE PRZYRODNICZYM WE WROCLAWIU**

Przeprowadzona dnia 5 września 2024 r.

przez Komisję ds. oceny śródkresowej w dyscyplinie weterynaria w składzie:

Przewodniczący:

prof. dr hab. Łukasz Adaszek, Uniwersytet Przyrodniczy w Lublinie

Członkowie:

1. dr hab. Michał Załęcki, prof. uczelni, Uniwersytet Warmińsko-Mazurski w Olsztynie
2. dr hab. Magdalena Żmigrodzka, Szkoła Główna Gospodarstwa Wiejskiego w Warszawie

Imię i nazwisko doktoranta:	Skarlet Napierkowska
Promotorzy:	dr hab. Agnieszka Partyka, prof. Uczelni dr hab. Pascal Froment
Temat rozprawy doktorskiej:	Mechanism of action of pesticides and their impact on rooster's fertility

I. Ocena postępów w realizacji indywidualnego planu badawczego:

Ocena Komisji:
Pozytywna/negatywna

Uzasadnienie oceny:

Skarlet Napierkowska is conducting her individual research program with a high degree of transparency and consistency.

She has successfully completed an *in vitro* experiment examining the effects of Imidacloprid, the first of three pesticides tested, on rooster semen quality. The results, which indicated that calcium efflux plays a role in the negative impact of Imidacloprid, were published in Poultry Science, a prestigious Q1 journal with an impact factor of 3.8, underscoring their scientific significance.

In addition, PhD student has completed an experiment on Tebuconazole, the second pesticide tested, where she evaluated the effects of various concentrations on rooster sperm motility and viability.

It is also noteworthy that Ms. Napierkowska has concluded the largest and most challenging component of the project, the *in vivo* experiment, which assesses the effects of permissible concentrations of pesticide residues on chicken semen under *in vivo* conditions. The collected data and results from this phase are currently being analysed and prepared for future publication.

In conclusion, the Commission has provided a highly favourable assessment of the progress made in implementing the tasks outlined in the IPB schedule to date. Work on doctoral dissertation proceeds smoothly and at the moment there is no risk of failure to complete the doctoral dissertation in the scheduled time.

II. Ocena realizacji programu kształcenia, stanu zaawansowania badań naukowych i postępu prac w przygotowaniu rozprawy doktorskiej:

Ocena Komisji:
Pozytywna/negatywna

Uzasadnienie oceny:

The research conducted by the PhD student represents a comprehensive investigation into the effects of three widely used and frequently detected pesticides—tebuconazole, imidacloprid, glyphosate—on rooster fertility. This study employs a wide range of techniques, encompassing both *in vitro* and *in vivo* approaches. The progress toward the completion of the doctoral dissertation is approximately 50%.

Currently, the data and results from the most complex component of the project, the *in vivo* experiment, are being analysed and prepared for publication. The *in vitro* portion of the research on imidacloprid has been fully completed, analysed, and published as an original article in a reputable scientific journal.

The PhD student has also completed a series of internships included in the learning program, such as veterinary practice focused on reproduction in breeding cats and dogs, and courses covering topics like the basics of resuscitation, assessment and diagnosis of neonatal dogs and cats, as well as bovine gynaecological examination. Additionally, she has attended academic events, including the Polish-French Symposium on new regulations in reproduction, and a course on the use of "Statistica" software. Ms. Napierkowska also actively participated in a conference and workshop on poultry science, where she received an award for her presentation.

In conclusion, the Commission has issued a highly favourable assessment of the progress made on the tasks outlined in the IPB schedule thus far. The work on the doctoral dissertation is proceeding smoothly, and there is currently no risk of failing to complete the dissertation within the scheduled timeframe.

III. Rozmowa z doktorantem

Ocena Komisji:
Pozytywna/negatywna

Uzasadnienie oceny:

The PhD student presented the research problem, the assumptions of the project, and the results of the research with clarity and precision. She demonstrated a strong command of the topics under discussion. A portion of the research findings has already been published in a reputable scientific journal. The PhD project is progressing according to plan, with all scheduled tasks successfully completed, including the *in vivo* research component.

OCENA KOŃCOWA




Pozytywna/negatywna

Uzasadnienie oceny: (min. 500 znaków)

The PhD student's research constitutes an extensive examination of the effects of three commonly used and frequently detected pesticides—tebuconazole, imidacloprid, and glyphosate—on rooster fertility. The study integrates a diverse range of methodologies, including both *in vitro* and *in vivo* approaches. This project is of significant scientific importance, and its final results will enhance the understanding of these issues. The conclusions derived from this research may have implications not only for poultry farming and veterinary but also for other sectors of agriculture and industries that utilize pesticides. Furthermore, the findings could influence legal regulations concerning the use and permissible levels of pesticides.

The successful execution of the project's various stages, the PhD student's dedication, the results obtained, and their dissemination through publication in reputable scientific journal have led the Commission to issue a highly favourable evaluation of this doctoral research, the student, the supervisors, and the progress made on the tasks outlined in the IPB schedule. These factors strongly indicate that the defence of the doctoral thesis is likely to be successfully completed within the scheduled timeframe.

Podpisy członków komisji:

1. .....
2. .....
3. .....