

Emily is the winner of the The British Society of Animal Science Undergraduate Thesis Of The Year Award for 2023. The competition, which recognises outstanding research in the field of animal science, saw a high level of submissions from universities across the UK.

Winner: Emily Hancock - University of Nottingham

- *Thesis Title: Effect of oregano oil on milk yield, methane emissions, and feed efficiency of dairy cows.* Emily Hancock of the University of Nottingham secured the top spot with her ground-breaking research on the impact of oregano oil on various aspects of dairy cow performance.

Emily will present her work at the British Society of Animal Science Annual Conference in Belfast 9-11th April. President Magowan says "this is a great opportunity for any animal scientist, especially for a young scientist who can share their work in a supportive environment. As career scientists, we all remember those early days of presenting our research and very much look forward to hearing about Emily's work and supporting her where we can".

Interview with Undergraduate Thesis of The Year Award (UTOTYA 2023) winner - Emily Hancock

How does it feel to be the winner of the BSAS Undergraduate Thesis of The Year Award?

To put it simply, unbelievable. I never, in a million years, thought that after the year I've had that my work would have been good enough to win something as big as this and it just goes to show that a bit of hard work and determination goes a long way and really does pay off in the end.

I did a project that was a little bit out there for me, I don't come from a dairy background and thought this would be a good change from my norm. I really enjoyed this project and became fascinated in what I was researching and this made me want to enter to share my work so hopefully other people would also be as interested as I was in something that could bring the dairy industry on leaps and bounds in terms of tackling climate change.

What affect do you feel winning the UTOTYA has had on your current and future career aspirations, and are there any other benefits from entering that you would like to tell us about?

Currently I have taken myself out of education. I have earned myself a Bachelors of Science Degree with Honours in Agricultural and Livestock Sciences and for me right at this moment in my life that is enough. I personally have had a very hectic year and I am currently just working within the agricultural industry and now applying what theory I have learnt which is a nice change and is reminding me why I aspired to work in this industry in the first place. This award has definitely made me reconsider re-entering education and possibly looking at a PhD in my future, most likely in a similar field as to my already completed thesis. I think it has once again piqued my interest in looking for organic and environmentally friendly ways in reducing the carbon footprint of the agricultural industry.

You won the UTOTYA for your dissertation titled: "Effect of oregano oil on milk yield, methane emissions and feed efficiency of dairy cows". Can you tell us a bit more about the focus of your fascinating study and its findings?

When trying to find an original topic to compose a thesis on you may find yourself hitting a lot of brick walls and thinking that everything, everywhere has been covered. However, I was walking across campus one day and heard a group of my peers talking about a study they had looked at the vaguely looked at essential oils reducing methane emissions of cattle and from there on I began to research and ended up down a rabbit hole on Google scholar reading papers and articles about how these essential oils did in fact reduce methane emissions, some more than others, with most of these papers only brushing over the effect of oregano oil and that is where my fascination began. I started questioning why wasn't oregano being looked at more in detail for its effects on dairy cows and decided this was the direction my thesis was going to go. And to briefly brush over my study I discovered that in different quantities, oregano oil had different effects. With it having a good antimicrobial quality to it, oregano oil works fantastically to inhibit fermentation in the rumen and therefore is an excellent methane mitigation strategy. Also, with oregano oil being more palatable than other organic methane reducing options, it means there is no effect on dry matter intake and therefore has no effect on milk yield and feed efficiency.

Are you looking forward to presenting at the BSAS 2024 conference, and how are you planning to prepare?

Honestly, I'm incredibly nervous, more so in case people don't find my research interesting. To prepare I am just going to go over all my research again and just ensure I am confident in what I am saying and what I have already learnt.

Do you feel like you would like to explore the world of animal science research further in the future, and if so which sector or topics would you like to carry out more extensive research into?

I am always open to research the animal science world further to find ways to work more effectively and efficiently. Personally, I think I would carry out more research into methane