



ses

school of environmental sciences

The Research Seminar Presentation by

Jennifer Hoogenboom

will be held on

Tuesday March 10th, 2020

At 15:30 pm

Alexander Hall 265

Title: Effect of LED light quality on nutrient uptake and secondary metabolite profiles of Cannabis sativa in controlled environments

The cannabis industry has just been beginning to increase in Canada and is projected to have 5 billion dollars in annual sales by 2024. The use of cannabis has been a revolution worldwide due to the medical properties and has led inclusively to the Canadian legislation in 2018. Studies have indicated that the medical use of cannabis can be used to treat a multitude of conditions which include cancer, HIV, lack of appetite, insomnia, epilepsy, mediate pain and many more. Presently, licensed producers and consumers can only rely on limited scientific research to optimize cannabis production. Particularly, information on the optimal parameters using light emitting diodes (LEDs) that can produce a consistent and high-quality product. LEDs have the advantage over conventional lighting since they can emit light of an specific color allowing specific wavelengths to be enriched, thus supplying the light quantity and quality essential for different phases of growth. My project aims to address this gap by evaluating the physiological responses and nutrient uptake of cannabis by using LEDs in controlled growth chambers at various points throughout the entire production cycle. This project will provide growers reliable information of light optimization to standardize their production practice to increase the relative concentrations of the medicinal components.

Everyone is welcome to attend

(This is a Research Proposal presentation by students in ENVS*6900)