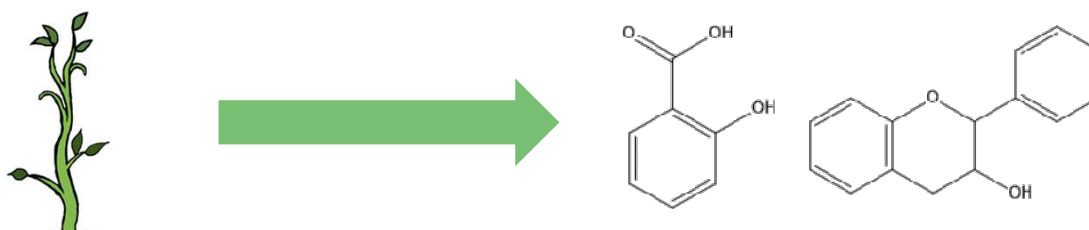


## UV-Vis spectrophotometric analysis of tomato plant extracts

Topic suitable for **Bachelor's Thesis, Biorefinery project**



Biomass waste streams are often left on fields for rotting or used for thermal energy production. But before we degrade or thermally convert the biomass waste to compost or energy, we can use the high potential of these wastes for production of high valuable molecules.

Tomato is one of the most consumed vegetable, mainly produced in greenhouses, all over the world. In 2018 about 182 million tonnes of fresh tomatoes were produced worldwide. Vegetative tomato residues (up to 230 mio tonnes, FAO2018) are an environmental concern as they will be infected by a large number of critical plant pathogens at the end of the life cycle and have to be treated. Vegetative tomato residues contain anti-oxidative, -fungal, -bacterial or inflammatory agents that can be used in many industries.

The aim of the work is the UV-Vis spectrophotometric analysis of extracts to determine the total amount of extracted poly-polyphenolic and flavonoid compounds in order to evaluate the extraction process.

### Scope:

- Literature research
- Analysis of samples
- Interpretation of data
- Writing scientific reports



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