

# 1 Introduction

stikord: - udføres på armadillo IV - Control af om den information der gives fra motorcontrollerne passer, de vi så har mulighed for at kigge i gamle ros bags - henvisning til problem formuleringen med hvilke data vi skal bruge -

It is necessary for the process to get an estimation of the energy

## 2 Materials and Methods

The Armadillo IV will be driven a distance of 10 m several times. Each run will have a different setup for simulating different scenarios. The power consumption will be measured during each run.

### 2.1 Materials

- Armadillo IV with Vibro crop implement
- Turnigy 130A Watt Meter and Power Analyzer
- camera

The test aims to provide an estimate of the power consumption during normal work. The depth of the cultivator is adjusted to 1.5 cm relative to the front wheels, see figure 2.1

$$A = [\text{required working depth}] - [1-1,5 \text{ cm}]$$

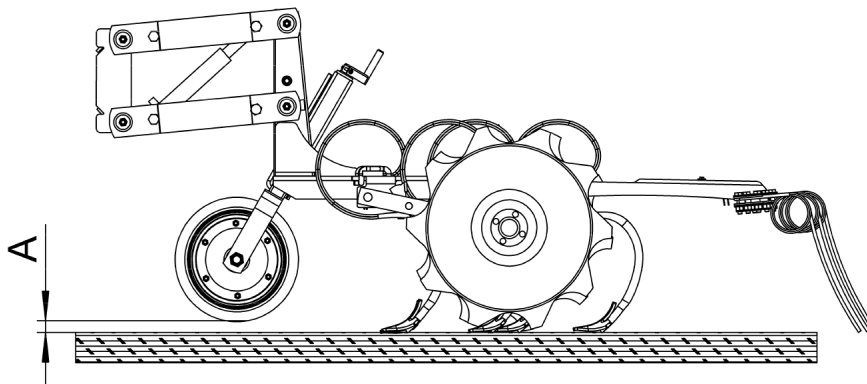


Figure 2.1: Working depth of cultivator during normal use

The test will be conducted on a piece of field that hasn't previously been processed. Driving on previously processed land would provide soil that is easier to drag the cultivator through and thereby produce a lower power consumption than on unprocessed land.

The motor controllers include a way for measuring of the power consumption. This data can be accessed through ROS bag. The tests will also be used to see in the internal power measuring will produce results similar to the Turnigy wattmeter. Stikword:

- Hvordan vurdere vi troværdigheden af data/dataanalyse

## References

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