# **Review over Forecast Data collection plan**

EXPERIMENT RATIONALES:

@ “In each time-step scan, all available mushrooms will be compared in terms of growth over 4 hours to determine the growth rate.”

Regular time interval would be the first target to accomplish to aid ease training a forecast model.

@”The collected data will include RGB images and depth information from the whole bed, in addition to environmental information captured using a set of sensors.”

How depth data can be advantageous overgrowth rate estimation? Growth rate is going to be estimated through (RGB -> B&W) contour analysis over time. May be depth is worthy collecting in case we need so.

METHOD:

8) Data collected per day will be scheduled as follows:

* 1. Flush 1: scan at 8 am, 12 pm, and 3 pm.
  2. Flush 2: scan at 9 am, 1 pm ~~10 am~~, and 5 pm.

In addition environmental information will be recorded semi manually (CO2, RH air temperature will be mounted onto Harvester and the rest (pH sensor, Air flow and Compost sensor will be carried by person and readings to be taken manually)

Requirement: we will need to operate back-to-back hours and stay alert all the time from 8 am to 5 pm

1. Collect environmental information using a set of sensors which are:
   1. Air temperature
   2. Relative humidity
   3. CO2
   4. Compost temperature and moisture.
   5. Air flow just above the casing of the bed.
   6. Compost pH

The time map for the data collection

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
| T4. Scan 1st flush bed while picking |  |  |  |  |  |  |  |  | Forecasting |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| T5. Scan 2nd flush bed while picking |  |  |  |  |  |  |  |  | Forecasting |

We cannot run the harvester while workers are picking, can we? (@while picking)

PEOPLE INVOLVED

If we are planning to do one day prior to data collection start-day and stay until the flush ends

A person needs to stay-

1+5=6 days in total ; 1 day prior to harvest and 5 days for harvest

Are we supposed to spend more than 6 days(or 7) in the farm at a stretch?

OUTCOMES

1. Mushroom growth rat**e** estimation (typo)