An Introduction to the Nursery Break-Even Price and Profit Estimator
Trent Teegerstrom, Ursula Schuch & Stuart Nakamoto
University of Arizona & University of Hawaii

The purpose of this presentation is to introduce you to the Nursery Profit Estimator by giving you a brief overview of what the spreadsheet does and what benchmarks to use.

Today’s Topics
1) Preliminary Information
2) Introduction to the Program
3) Wrap-up

Underlying idea: “rent” nursery space to the “guest” plant

This sheet summarizes all the results of the template. The first part lists (1) each product, (2) the expected sales price (enter price on this page), (3) cost estimated by the spreadsheet, and (4) the expected profit.
Many nurseries purchase products from other growers. The second part allows you to compare buying a product against growing it.

- **Black = grow**
- **Red = buy**

The following information is needed to use the spreadsheet:
1. Map or diagram of your operation, showing all your production areas.
2. IRS Form 1040 Schedule F or other tax form that shows your expenses.
3. Your knowledge and/or any production records for specific products.

As with any other spreadsheet, the accuracy of the results will depend on the accuracy of the data going in. So if you use ballpark figures, you should treat results as ballpark figures even if the spreadsheet makes the numbers look very precise. GIGO!

Let’s move now to the Production Space page.

The first part asks for information from your map.
- "% open" = the amount of space that is typically empty at any given time.
- Our aim = find the "working" space or square footage that actually earns revenue.
Part C (last section on this page) basically involves depreciation.

Unallocated Cash Cost Annual sheet
Unallocated cash costs = out-of-pocket expenses not tied to specific products
Can split between field and shade house
“Other” will allocate by square footage.
“italics” means for information only.

Unallocated costs are similarly entered for the rest of the sheet and a subtotal is calculated for each group.

As a side note, this section contains cost information that eventually will be entered in all the sheets.
One problem that might occur is double counting.
“Grand Total” = check to see that the information entered is not more than what shows up on your Schedule F.

For the next worksheet, we take a detour to look at stock plants and estimate the costs of producing our own stock such as cuttings or buds.

Stock Plants sheet
- names of the stock plants
- area used
- total unused space in the stock plant area
- number of units produced annually, units - appropriate for that plant
If costs known for each plant, enter in respective columns. Otherwise enter totals for all stock plants in the "unallocated" column. Subtotals allocated by area used.

If available, enter costs that can be allocated to each product. (not shown) Calculator available to convert per unit to total costs.

Total for each stock plant is divided by the number of units to get the cost per unit. This can be used as the "stock cost" in the next worksheet on "Allocated Cash Cost (ACC) and Plant Info".

Expected losses for each plant: percentage or actual number of units lost.

Using the space and number of containers, the spreadsheet calculates the space used by each product and keeps a running total of the area used by all the products that were entered.

Enter product name, whether the product is grown in the field, then information on the area used.

Area information: either container-tight or spaced out situations. Container-tight: enter container length and width, or the diameter twice. Spaced out: enter spacing dimensions. Spreadsheet calculates the area used by each container.

The top portion of the Analysis sheet collects information from other worksheets.
Analysis and Comparison sheet
Collects information from other worksheets and summarizes to get the total cost per unit for each plant. Calculates the expected profit for the sales price we enter.

For our example, the cash costs for Plant 1 add up to 98¢ per plant. We then add the 2.8¢ for unallocated non-cash costs, then the return on investment and cost of plant losses to get a grand total for Plant 1 of $1.076 per plant.

At a sales price of $0.60, we expect to lose nearly $0.48 per plant.

The last three lines are presented in a more compact form in the next worksheet.