



PURDUE COLLABORATION

INTERVIEW OF U.S. GREENHOUSE MANAGERS. PURDUE IGEM IN
COLLABORATION WITH VALENCIA UPV IGEM.

Universidad Politécnica de Valencia
Valencia UPV iGEM 2017



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VALENCIA
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- 1) What problem do you have when you grow?
Making sure that you do not get insects viruses and disease in your crop.
- 2) Which aspects are taken more into account when designing a greenhouse?
Designing the right type of greenhouse for the crop that you're growing making sure that your wind and snow load are able to handle your region.
- 3) What problems are present in a greenhouse?
Insects and disease is an ongoing battle in a greenhouse
- 4) What is more difficult to control in a greenhouse? A pest or disease, crop nutritional deficiencies or greenhouse conditions (temperature, moisture, etc.)
Disease, crop deficiencies, moisture.
- 5) Which crops are more profitable in a greenhouse?
(Vegetable/horticultural species, solanaceae and cucurbitaceae mainly).
Solanaceae
- 6) Would you like to grow timeless crops that are currently unviable due to climatic conditions or because they require a high investment?
No.
- 7) What do you know about hydroponics?
I've been work with hydroponics for 21 years.
- 8) What factors are more difficult to control in a hydroponic crop?
Fertilizer and moisture.
- 9) Do you consider that hydroponic crops are profitable?
Yes.
- 10)What do you know about genetically modified plants/crops?
I've been work with them a long time
- 11)Do you consider that GMOs have a place in a sustainable agro-food system?
Yes.

Greenhouse manager 2: 2017/10/02 9:37:39 PM AST

- 1) What problem do you have when you grow?
Water management

- 2) Which aspects are taken more into account when designing a greenhouse?
How it is going to be used
- 3) What problems are present in a greenhouse?
Insects and disease
- 4) What is more difficult to control in a greenhouse? A pest or disease, crop nutritional deficiencies or greenhouse conditions (temperature, moisture, etc.)
Disease control.
- 5) Which crops are more profitable in a greenhouse?
(Vegetable/horticultural species, solanaceae and cucurbitaceae mainly)
N/A
- 6) Would you like to grow timeless crops that are currently unviable due to climatic conditions or because they require a high investment?
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- 7) What do you know about hydroponics?
Nothing we don't grow hydroponics.
- 8) What factors are more difficult to control in a hydroponic crop?

N/A
- 9) Do you consider that hydroponic crops are profitable?
N/A
- 10) What do you know about genetically modified plants/crops?
Such as?
- 11) Do you consider that GMOs have a place in a sustainable agro-food system?
Yes

Greenhouse manager 3: 2017/10/04 3:00:09 PM AST

- 1) What problem do you have when you grow?
Fungus gnats and thrips were the biggest insect problems
yes
- 2) Which aspects are taken more into account when designing a greenhouse?
Directional orientation, types of crops to be grown, local weather, Wholesale or retail operation.

- 3) **What problems are present in a greenhouse?**
Insects, diseases, humidity in winter months, maintaining optimum temps in certain seasons.
- 4) **What is more difficult to control in a greenhouse? A pest or disease, crop nutritional deficiencies or greenhouse conditions (temperature, moisture, etc.)**
Diseases
- 5) **Which crops are more profitable in a greenhouse? (Vegetable/horticultural species, solanaceae and cucurbitaceae mainly).**
That depends on your market, weather, all costs involved. Not enough information to decide.
- 6) **Would you like to grow timeless crops that are currently unviable due to climatic conditions or because they require a high investment?**
Not really sure what you are asking in this question. Seems unclear.
- 7) **What do you know about hydroponics?**
Works well on many crops
- 8) **What factors are more difficult to control in a hydroponic crop?**
I personally have not done hydroponic growing but I would imagine it would be the crop nutrition.
- 9) **Do you consider that hydroponic crops are profitable?**
Yes
- 10) **What do you know about genetically modified plants/crops?**
In general they have benefited society more than creating a monster that is harmful.
- 11) **Do you consider that GMOs have a place in a sustainable agro-food system?**
Yes.

Greenhouse manager 4: 2017/10/04 4:44:13 PM AST

- 1) **What problem do you have when you grow?**
Problems vary from crop to crop and year to year. Establishing good suppliers is the first step with a successful crop. We grow annual crops (such as geraniums, impatiens, petunias) to supply our own garden centre. Knowing the grower and the quality of the young plants he/she produces ensures the best success in growing.

2) Which aspects are taken more into account when designing a greenhouse?

Direction of the house, ability to keep clean, type and size of greenhouse, airflow, heating, k bench design and placement.

3) What problems are present in a greenhouse?

Insects, diseases, water supply, labor, cost of space, crop failure, extreme heat and extreme cold weather conditions, failure of equipment.

4) What is more difficult to control in a greenhouse? A pest or disease, crop nutritional deficiencies or greenhouse conditions (temperature, moisture, etc.)

Insects and diseases. We try to use minimal chemicals.

5) Which crops are more profitable in a greenhouse?

(Vegetable/horticultural species, solanaceae and cucurbitaceae mainly).

Horticulture species. We do not grow vegetables.

6) Would you like to grow timeless crops that are currently unviable due to climatic conditions or because they require a high investment?

Timeless crops have proved profitable for us.

7) What do you know about hydroponics?

We do not employ hydroponics.

8) What factors are more difficult to control in a hydroponic crop

We do not grow hydroponics. It is not the type of business we are in. People buy potted plant material from us that they can plant outside in their own garden or pots.

9) Do you consider that hydroponic crops are profitable?

Yes, it could be with the proper equipment and growing processes.

10)What do you know about genetically modified plants/crops?

The DNA of the plant is changed to produce a certain desired benefit.

11)Do you consider that GMOs have a place in a sustainable agro-food system?

Yes.