Agriculture Research Project

For this project you will be researching 3 food products of your choice. Pick one grain, one fruit or vegetable, and one animal. Pick foods you tend to eat a lot of and that you are interested in learning about. If you are a vegetarian you may replace the animal with another protein rich product.

You will create a poster presentation of your research. For large meetings or conferences, people will often use PowerPoint as a basis to organize their work and then arrange the slides on a poster to present to others. This is the approach I would like to take for this project.

For each food, please research/investigate the following:

1. Key crop facts:
   1. Top producing countries worldwide
   2. Overall production worldwide (tones produced and $ value)
   3. Top producing states in US
   4. Overall production in US (tones produced and $ value)
2. Environmental Issues
   1. Crop land area covered (US or worldwide)
   2. Fertilizer use (US or worldwide) (Nitrogen, Phosphorus, Potassium/Potash)
   3. Pesticide and Herbicide use (US or worldwide)
   4. Travel distance from “farm to table”
3. Industrial vs Organic
   1. Percentage of crop that is GMO
   2. Percentage of crop that is organic
   3. Compare price of standard vs. organic produce (may need to go to store for this)
4. History of this food. What is known about its development by humans? Where does it originate from? What changes has this food undergone? What changes might be in store in the future?

Some possible websites to use would be:

* FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (<http://faostat3.fao.org>)
* UNITED STATES DEPARTMENT OF AGRICULTURE data and statistics page (<https://www.nass.usda.gov/Data_and_Statistics/index.php>)
* Feel free to use other websites that you come across. Please keep track of those sites for your citations.

Agriculture Research Project Questions

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As you look at projects please respond:

1. For 6 projects pick a food to detail (36 pts):
   1. Total production in weight and $ value
   2. Top producing country, and state in US
   3. Environmental concern addressed
   4. “Farm to Table” distance
   5. Industrial/Organic topic addressed
   6. History

|  |  |  |  |
| --- | --- | --- | --- |
| Author | 1 | 2 | 3 |
| Food |  |  |  |
| Production |  |  |  |
| Top Producing Country |  |  |  |
| Top Producing State |  |  |  |
| Env. Concern |  |  |  |
| Farm to Table Distance |  |  |  |
| Industrial / Organic |  |  |  |
| History |  |  |  |
|  |  |  |  |
| Author | 4 | 5 | 6 |
| Food |  |  |  |
| Production |  |  |  |
| Top Producing Country |  |  |  |
| Top Producing State |  |  |  |
| Env. Concern |  |  |  |
| Farm to Table Distance |  |  |  |
| Industrial / Organic |  |  |  |
| History |  |  |  |

1. As you look at the projects, is there any conflicting data? For example if multiple people did wheat, are there research results similar or not? Explain how this could occur. (3 pts)
2. Think about your own diet. Which of the foods presented are a regular part of your diet? What foods that you typically eat have not been presented? (3 pts)
3. What changes could you make in your diet or buying habits to personally address some of the issues addressed in the project or other discussions from class? (3 pts)
4. What are some of the challenges/difficulties with making those types of changes? (3 pts)
5. We have not yet discussed in detail, but what are some concerns you might have about pesticide or herbicide use on crops? (3 pts)
6. We have not yet discussed in detail, but list out some of the arguments for and against
   1. Industrial scale farming (3 pts)

* 1. Organic farming (3 pts)

1. We have discussed GMO crops. Lay out some of the arguments for and against GMO crops. (3 pts)