

Did You Know?

Greenhouse and Shadehouse Production

A Brief History of Greenhouses

The first documented mention of greenhouse technology explains that Tiberius, the second emperor of Rome (42 B.C. to 37 A.D.) applied greenhouse technology so he could enjoy cucumbers out of season. The technology was not much used until the 1500s when commercial glass production began. The 20th Century brought the innovation of electricity, which again increased the potential for food production in greenhouses.



Cucumbers reached to the ceiling in a Bachman greenhouse. Township of Richfield, Minnesota. C 1910

Tomatoes are the leading greenhouse vegetable crop, followed by European cucumbers, lettuce, peppers, and culinary herbs such as basil, sage, and rosemary.

What's the difference?

The terms **greenhouse** and **hothouse** are synonymous; both terms refer to a structure with some covering material, such as a glass or plastic. The structure traps heat, and provides protection from weather and drastic temperature changes. Produce grown in a greenhouse doesn't suffer the same amount of weather stress as field grown, and therefore has fewer imperfections.

A **shadehouse** is a metal framed large covered area - sometimes up to 20 acres in size, draped in mesh to create shade and cool things down. In Mexico, some shadehouses have whitewashed glass, which not only provides cover from the very hot sun, but also protects plants from high winds. In a cold snap, these more elaborate shadehouses can also be heated to prevent frost damage to the plants. In the Feb 2011 Mexico freeze, growers with this level of technology saved their crops, where low tech shadehouses and field crops perished.

A **cold frame**, or **hoophouse**, is a small plastic greenhouse used to get plants started, or make it a little warmer for plants that otherwise might not make it - some growers will line these up and have several acres covered by continuous cold frames. A more rudimentary design, they are usually open at the end for ventilation. A **cloche** is a very small plastic hoop-house, generally only a few feet high, used to protect transplants.

More Info:

<http://attra.ncat.org/attra-pub/PDF/ghveg.pdf>

www.ehow.com/facts_7349335_hothouse-greenhouse-history.html

<http://ag.arizona.edu/hydroponictomatoes/overview.htm>

<http://www.certifiedorganic.bc.ca/rcbtoa/training/greenhouse.htm>