Suwon is a large agricultural area including greenhouse, high tunnel and field production.



Small plots of ginseng production were scattered around the area.



Ginseng is produced under one-sided shade structures.



They were produced on raised beds with a rice straw mulch.



Rice fields were arranged between greenhouse vegetable production.



Rice transplants being brought to the field for planting.



Mechanically planting rice.



There were several soilless or hydroponic vegetable producers in Suwon. We visited tomato and lettuce <u>producers</u>.



The first stop was Sala Farm – a lettuce producer.



It was a high-tech computercontrolled hydroponic system.



They produced high end leaf lettuce.



Mr. Hong explained his production using a nutrient film technique system.



Transplants are produced in peat blocks.



A single worker places transplants into each slot in the channel.



Once loaded into the channel, the computer controls the environment, nutrient solution and moves the channels through the greenhouse until they reach the harvest station.



A nutrient solution is added to one end of the channel. The channel is slanted and gravity moves the solution to the other end where it is collected and recycled.



The packaged lettuce greens sold for about \$2.50.



We also visited a greenhouse tomato producer who appeared happy to get a UK Hortclub T-shirt.



Production was in a soilless nutrient trough system. The indeterminant tomato vines were trained on vertical strings.



The tomato plants were grafted and each plant was supplied with a nutrient solution from spray stakes.



Tomato clusters were thinned to produce large, consistent-sized fruit.





Tomatoes were harvested at the breaker stage where they were just showing color and sorted by size.





Tomatoes were then boxed for shipping.





A few never made it to the boxes.



Gyeonggido Agricultural Reasearch and Extension (GARE) Center



Dr. Lee was our host in Suwon and for the visit to (GARE) Center.



They were developing a province-wide smart system that tracked key aspects of environment and yield for greenhouse vegetable production.





There was an extensive cut flower rose breeding program.



The rose breeder explaining the program objectives and how the process works.



The breeding team looking for the appropriate female parent.



The female parent is ready once it has had the petals and stamens removed and the stigma surfaces become receptive to accept male pollen.



Previously collected male pollen is brushed onto the stigma of the female plant.



Each white bag represents a novel breeding cross.



Explaining the breeding process.



There was an emphasis at the research station on controlled environment and hydroponic vegetable and fruit production.



Several commercially available systems were on demonstration.



There was a vertical farming / plant factory system using LED lamps.



There was an aquaponic leafy green production project.



This was an aeroponic production system for strawberry.



Greenhouse strawberry production is established in Korea. This was a breeding program but also shows the basic soilless production system on raised benches for strawberry.



Soilless strawberry production.

