

# Report of the MACQU demo

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## Type CAUA-6

1.Place: Chaoyang Tianning

Installation Time: 2013-4-21



Students are installing the MACQU system.



The full installed system

The recycle tank.



Wireless sensor node



Substrate

Plants: tomato



Tomato plants in Greenhouse

Fertilizers: A variety of single fertilizer and compound fertilizer



The fertilizer tank and irrigation pump.

2.Place: Huludao

Installation Time: 2014-8



The full installed system.



The recycle tank and the input well.

## Plants: pepper



## Fertilizers: A variety of single fertilizer and compound fertilizer



The fertilizer tanks.

3.Place: Lingyuan

Installation Time: 2014-8



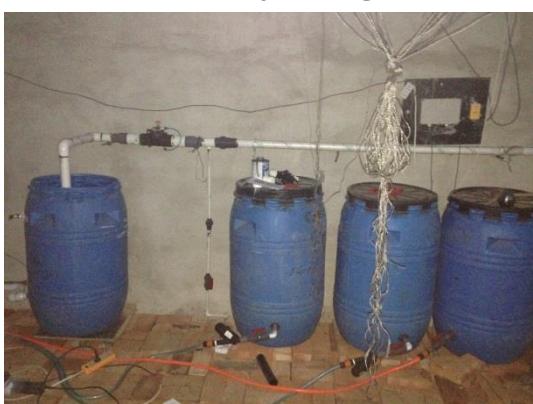
The full installed system.



The recycle line and valve.

Plants: pepper

Fertilizers: A variety of single fertilizer



The fertilizer and acid tanks

4.Place: Yunnan Academy of Agricultural Sciences

Installation Time: 2016-3



The full installed system.



The input water line, irrigation pump and filters for input and fertilizers.

Plants: peach trees



Peach trees in Greenhouse

Fertilizers: compound fertilizer



The fertilizer tanks

## Type CAUA-12

1.Place: Chaoyang Tianning

Installation Time: 2013-11



The full installed system.



The wireless sensor node.

Plants: tomato



Tomato in substrate

Fertilizers: A variety of single fertilizer and compound fertilizer



## 2.Place: Langfang Sike

Installation Time: 2014-3



The full installed system.



The recycle tank and control valve.

Plants: tomato



Tomato plants in solar greenhouse

## Fertilizers: A variety of single fertilizer



The fertilizer tanks

3.Place: Langfang Huaxia

Installation Time: 2014-4



Students installing the MACQU system.

Plants: eggplant, pepper



Peppers in greenhouse

Eggplants in greenhouse

## Fertilizers: A variety of single fertilizer



The fertilizer tanks

4.Place: Chaoyang Kazuo

Installation Time: 2014-8



The full installed system.



Substrate and drippers in solar greenhouse

## Plants: seeding and melon



## Fertilizers: A variety of single fertilizer



## Tanks for fertilizers and acid



## The fertilizer tanks

5.Place: Shenyang Agriculture University

Installation Time: 2015-11



The full installed system.



Two irrigation line

Plants: lettuce



The recycle tank.



Hydroponic cultivation of lettuce

## Fertilizers: A variety of single fertilizer



The fertilizer and acid tanks

6.Place: Yunnan Kaiyuan

Installation Time: 2015-10



The full installed system.

Plants: rose



Rose in soil

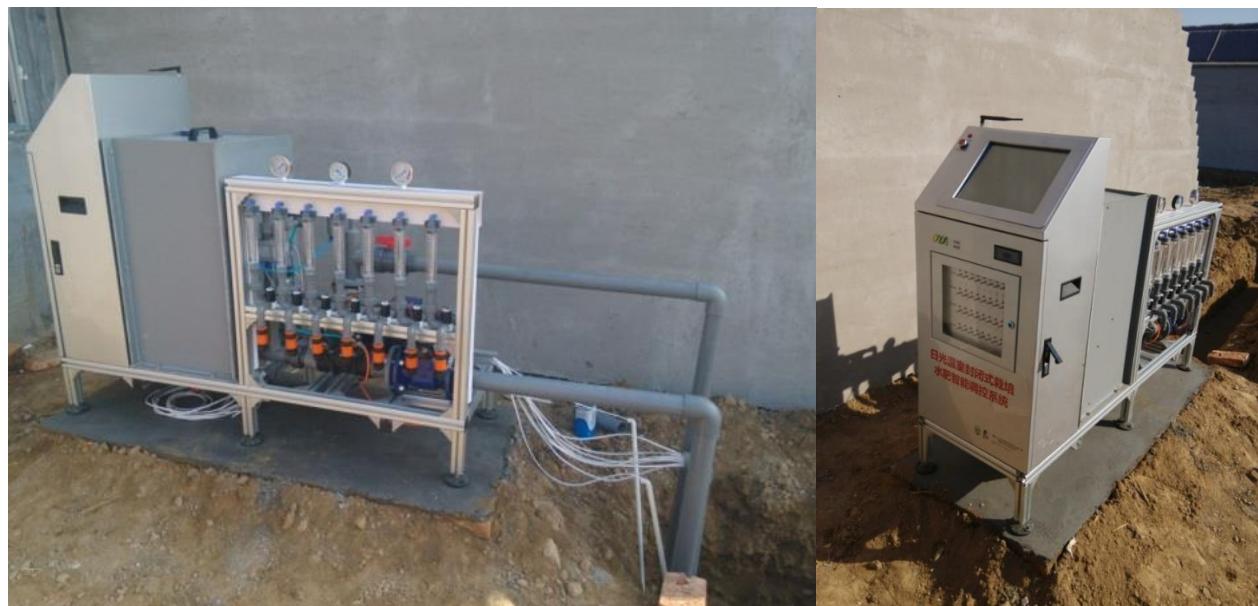
Fertilizers: seaweed fertilizer



The fertilizer tank and the filters for each tank.

7.Place: Shandong Huimin

Installation Time: 2015-10



The full installed system.



The water and wire lines.

Plants: tomato, pepper, cucumber



Tomato in substrate

Pepper in substrate

Fertilizers: A variety of single fertilizer



The fertilizer tanks