

# Controlled Environment Hydroponic Research and Development Centre successfully grows out-of-season vegetables and fruits (with photos/video)

The Agriculture, Fisheries and Conservation Department (AFCD) and the Controlled Environment Hydroponic Research and Development Centre today (September 10) announced that certain out-of-season winter vegetables and fruits including cherry tomatoes, strawberries and spinach have been successfully grown with controlled environment hydroponic technology.

The Agricultural Management Officer (Agro-technology) of the AFCD, Dr Kevin Wong, said, "Winter crops like to grow in cool weather and hence the produce in winter is of better quality. But with controlled environment hydroponic technology, they can grow steadily throughout the year. It helps to extend the crops' supply periods and raise farmers' income in summer (the low season), and the fact that the crops are produced indoors can also provide extra protection and avoid the effects of climate and pests on the yield."

The winter vegetables that the Centre has introduced included three varieties of cherry tomatoes. They are not only rich in nutrition, but also have different flavours and textures. The three varieties have sweetness between 8.5 and 10.6 degrees Brix and can be consumed as fruits. Furthermore, the cherry tomatoes can be harvested multiple times and the harvesting period can be as long as a year.

Another winter fruit variety successfully grown is the strawberry. It is often used in cooking and in making jam and various kinds of desserts. It is popular in the market and has high production value. The strawberry variety grown this time has an average sweetness of around 11 to 12 degrees Brix. The harvesting period is as long as 10 months and can cater for different needs of the market.

The Centre has also introduced two new varieties of spinach. Spinach likes cool weather. With controlled environment hydroponic technology, the crop is easy to grow and the harvest can be made after 28 to 30 days. The textures of the two varieties of spinach are tender and smooth and of good quality. In addition, the supply period of the seeds of ordinary spinach is short. The different supply periods of the seeds of these two varieties can help enhance the flexibility of the trade in purchasing and selecting seeds, therefore extending the supply period of spinach.

The Centre was set up as a joint initiative by the AFCD and the

Vegetable Marketing Organization in 2013. Through research and demonstration of advanced technology and facilities in hydroponics, the Centre provides references for the trade and interested investors. Staff of the Centre also visit different hydroponic farms regularly to provide technical support. The Centre is also proactively engaged in research and development, including selecting and testing new varieties to broaden the spectrum of local hydroponic vegetables and offer wider choice to the market.

