Rural Liquid Fertilisers

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Mango Flowering and Managing Crop Nutrition for the Mango Season

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FROM THE ARCHIVES

We revisit an earlier news article about mango that supplements last week's publication about this favoured fruit crop.

It is always good to look back at some of our loyal customers' success stories and their learning experiences, because this way the knowledge is shared.

Hainan Province is one of the main producing areas for mangoes in China.
Generally, the Hainan mango begins its flower bud differentiation in 11-12 months and blooms in February of the following year. Maturity takes a further 5-6 months under normal growing conditions. There is however, greater product competitiveness between mango and other fruits in its natural selling season often resulting in lower prices, and this can sometimes affect the enthusiasm of mango growers for growing this crop.

However, by taking advantage of out-of-season technology for cultivation and mango management to advance flowering, fruit bearing and listing time, the Hainan mangoes can become available as early as February to be available during the Spring Festival.

This way the Hainan mango growers can get greater economic benefits.

The key to the anti-seasonal cultivation and management of mango is the scientific flowering and management of process in the flowering phase. This is also a prerequisite for getting a premature, high yield and good quality mango. However, growers need to be cautious when undertaking the process of flower forcing. So, how can mango growers grasp the opportunity to achieve this success?

The RLF Sales Manager in Hainan Province, Gong An carried out a demonstration test of mango flowers forcing in Nantian Farm, Sanya, Hainan.

The Demonstration Details

Test time	12th September 2017
Test location	Nantian farm, Sanya City, Hainan Province
Crop	Mango
Variety	Tai Nong and Jin Huang
Test farmer	Yu Ping
Test objective	Promote flower bud differentiation, advance flowering time and ensure flowers grow in good order.

The Fertiliser Program

1. On 12th September 2017 foliar spray with RLF Foliar **Boron Plus**, potassium nitrate, calcium nitrate, ethephon, free amino acid and cytokinin to reach flower formation.
2. On 16th September 2017 foliar spray with RLF Foliar **Boron Plus** and Ultra Foliar **Fruits & Veggies Plus**, potassium nitrate, calcium nitrate and cytokinin to reach flower formation.
3. On 22nd September 2017 foliar spray with RLF Ultra Foliar **Fruits & Veggies Plus** and alginate to strengthen flower growth.

The weather conditions experienced during this fertilisation process were as follows:

- 14th September there was a typhoon.
- 24th September there was a tropical depression with persistent high temperatures and rainy weather.

The Outcomes for Variety Mango Tai Nong

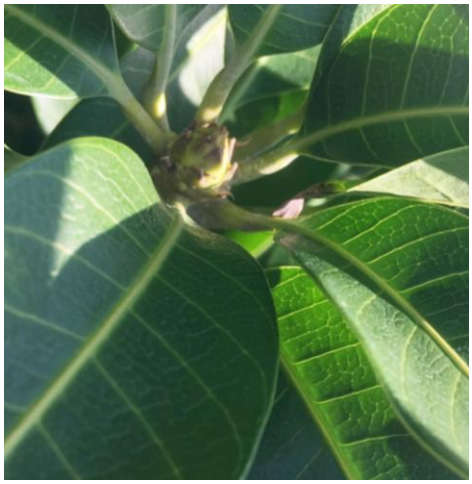
The growth of Tai Nong Mango on 12th September 2017

The status on 16th September 2017 as flower bud differentiation begins to appear.

The status on 26th September 2017 with the flower formation rate above 95%

The growth of Jin Huang Mango on September 12th

The Outcomes for Variety Mango Jin Huang



The status on 19th September 2017 as the flower bud differentiation begins to appear

Problems to be Avoided

With excessive use of flowering regulators the mango may be affected with problems such as rotten head and shelling, particularly under rainy weather conditions as is shown:

These two picture images indicate the phenomenon of mango rotten head

Remedial Measures can be Taken

1. Foliar spray with RLF **Fruits & Veggies Plus** on two occasions.

2. If the rotten head and shelling problems are serious, firstly take crop protection measures to control the problems, and then choose appropriate opportunities to conduct the flower forcing procedure once more.

Summary

1. The combination of foliar spray with RLF **Fruits & Veggies Plus** can effectively reduce the occurrence of shelling and rotting head during the flowering forcing stage of anti-seasonal mango under rainy and hot weather.

2. The rational use of regulator and mineral nutrition can provide adequate large, medium and trace elements for flower bud differentiation.

3. The application of RLF **Fruits & Veggies Plus** and RLF **Boron Plus** in the flowering phase can greatly strengthen the flower growth, improve the pollination rate and create favorable conditions for the formation of big mango fruit.

The Main points for Success

In order to achieve effective flower production, mango growers need to consider three aspects.

1. **Accumulation of hormones**. The supplement of ethephon in prophase regulation period and cytomin in flower forcing phase all contribute to flower bud differentiation.
2. **Accumulation of nutrient**. Increase the accumulation of organic matter (or other active substances) and middle and trace elements.
3. **Weather**. Ensure a certain amount of cold accumulation and avoid rain if at all possible.

Mango is a famous tropical fruit all over the world and is much loved as the 'King of Tropical Fruit'. Science and Technology are playing a part in positioning this fruit into the market at the best possible time for growers so that they reap the rewards of their efforts.