# **Demonstration 6: Fertiliser Management**

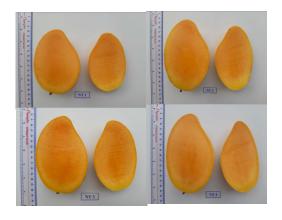


- Identify optimal NPK fertiliser dosage to maintain yield without impacting on quality
- Reduce production costs
- Reduce negative environmental impacts

### Method

- Model farm experiment
- NPK fertiliser applications x 4
- 1. Post Harvest 60% N + 50% P<sub>2</sub>O<sub>5</sub> + 40% K<sub>2</sub>O + 60% Ca
- 2. Pre flowering induction  $50\% P_2O_5 + 30\% K_2O +$ 40% Ca
- 3. 3 weeks post fruit set 20% N + 15% K<sub>2</sub>O (fruit approx. 1 - 2 cm)
- 4. 8 to 10 weeks post fruit set 20% N + 15% K2O







Cut fruit - 7 days after harvesting -Cat Chu (left), Cat Hoa Loc









### What we learnt

Different application dosage of NPK affects yield components -

- weight
- · length
- width
- yield/tree
- fruit quality (pulp thickness)

NPK dose rate does not affect -

- total number of mangoes/tree
- · fruit diameter
- brix content
- peel colour & pulp

## What we recommend

- Only 75% NPK dosage required (reduced cost & environmental impact)
- Spray Boron post harvest to flowering stage to improve fruit set
- Apply calcium soil application to improve internal quality & fruit peel





