

Chapter 6

Conclusion

1. The potassium chlorate could induce flowering of derooted air-layered longan cv. Daw.
2. Rooted and derooted longans developed flower buds at 25 DAT and flowering at 30-45 DAT by potassium chlorate at the concentration of 500 ppm.
3. Chlorophyll a, b and total chlorophyll contents of all treatments mostly did not change but the content within treatment tended to decrease as the study time increased.
4. Total nitrogen, nitrate, phosphorus, potassium and calcium contents in leaves and shoots and nitrate reductase activity tended to decrease as the study time increased.
5. IAA, gibberellin-like substances, cytokinin-like substances contents in shoot and leaf decreased while ethylene did not change during flower induction period.
6. The results in this study did not agree with hormonal balance hypothesis for flower induction. There should be other pathways for longan flower induction by potassium chlorate which are independent from the hormonal balance pathway.