

CHAPTER 6

CONCLUSIONS

Experiment 1: Effects of defoliation and girdling on panicle position of potassium chlorate treated trees.

1. The potassium chlorate could induce flowering of longan.
2. The position of flowering was depended on sited of girdling and leaves defoliation.
3. Potassium was transported from root to shoot of the tree via the xylem transported.
4. There are some substances and/or signals which were synthesized in the leaves after treated with potassium chlorate and transported from the leaves via phloem to the shoot which promoted flowering of the potassium chlorate treated trees.

Experiment 2: Effects leaves maturity on some isozymes changes in potassium chlorate treated longan trees

1. The peroxidase isozyme contents in leaves tended to increase after treating with potassium chlorate for 7 days.
2. The esterase isozyme contents in leaves tended to increase after treating with potassium chlorate for 3 days.
3. The shikimic dehydrogenase, malate dehydrogenase, superoxidase dismutase, glucose-6-phosphate dehydrogenase isozymes of the leaves from treated and untreated trees were not detected in this study.

Experiment 3: Effects of potassium chlorate on changes of proteins in longan leaves during flowering period.

1. The total proteins in longan mature leaves increased before flowering.
- 2 After longan trees were treated with potassium chlorate for 14 days, two news groups of proteins were synthesized in leaves of longan trees (during flower induction period).
3. The molecular weights of the two new groups of protein were 17.18 and 33.88 kDa.