The study was carried out in the 8-year-old *Hevea brasiliensis* plantation intercropped with the 4-year-old *Aquilaria crassna,* at Trat Agroforestry Research Station, Trat Province, from March 2005 to March 2006. It focused on the effects of pruning of *H. brasiliensis* branches on its growth and latex yield and growth of the intercropped *A. crassna.* There were three pruning levels applied to *H. brasiliensis* trees including, no pruning (P0), pruning to 1/2 of the total height above ground level (P1) and pruning to 2/3 of the total height above ground level (P2).

The results showed that the pruning of *H. brasiliensis* branches in P1 and P2 decreased both of its diameter growth and latex yield. The diameter growth and latex yield decreased as the pruning levels increased. Likewise, the growth rate and latex yield of the pruned *H. brasiliensis* in P2 were lower than the other treatments ($p<0.01$). The stem growth of the intercropped *A. crassna* with the pruned *H. brasiliensis* mixed plantation was increased as the pruning levels increased. The diameter and height growth of *A. crassna* in P2 showed significantly greater than the other treatments due to increasing light intensity under the canopy after removing of the *H. brasiliensis* branches.

The suggestion from the above results is that the branches-pruning for *H. brasiliensis* should be applied to 1/2 of the total height above ground level. So that the latex yield of the pruned *H. brasiliensis* will not be significantly decreased. The recommendation is also suitable for enhancing growth of the intercropped *A. crassna*.

|                      |                          |     /     /     |
| -------------------- | ------------------------ | --------------- |
| Student's signature  | Thesis Advisor's signature |               |