

Effect of Plant Growth Regulators and Pruning on Growth of Chinese Mahogany

Bing-Dwo Su and Ming-Teh Huang¹

Summary

The influence of plant growth regulators on cuttings growth and annual pruning times on paripinnate leaf yield of Chinese mahogany (*Cedrela sinensis* Juss.) under field condition were investigated in this experiments.

The cuttings of Chinese mahogany were treated with mancozeb 80% powder, NAA 4000ppm (powder), IBA 4000ppm (liquid), and IBA 5000ppm (powder). It resulted that NAA had the best effect on increasing leaf number and leaflet length and promoting leaf numbers on cuttings. The sprouting rate of lateral buds on cuttings treated with NAA was 16%, and others were below 10%. The rooting number and length of cutting were also significantly induced by NAA treatment. Besides, it had no obviously effect on sprouting numbers of cuttings in all these treatments.

To change the pruning months appeared greater benefits than to be the dense planting in Chinese mahogany. The edible paripinnate leaf length and yield from the shoots pruned only in March had been promoted than that pruned in other months. However, when plants were pruned in March, June, and September, it got the most sprouting numbers and the minimum leaf and budding length during the year. To compare the different pruning methods, pruned in March to June with pruned in March to September, more edible paripinnate leaf yield occurred pruned in March to September than the other. There were not significantly different in these two methods in shoot sprouting numbers, leaf length, and the length and width of paripinnate leaf.

Key words: Chinese mahogany, Plant growth regulators, Pruning, Cutting.

¹ Associate Researcher and the Director of Taitung DARES