CHAPTER V
CONCLUSION

In this study, eight compounds were isolated from the methanol extract of *Dendrobium brymerianum*. They were structurally characterized as moscatilin [**59**], flavanthrinin [**176**], gigantol [**50**], lusianthridin [**185**], nobilone [**112**], dendroflorin [**110**], denchrysan B [**109**], and tristin [70]. These isolated compounds were evaluated for cytotoxic activity. Moscatilin [**59**], flavanthrinin [**176**], lusianthridin [**185**] and denchrysan B [**109**] exhibited cytotoxicity against KB cells. In addition moscatilin [**59**], gigantol [**50**], lusianthridin [**185**] and dendroflorin [**110**] showed cytotoxicity against H460 cells. Interestingly, moscatilin [**59**] and dendroflorin [**110**] also exhibited the potent anti-migration effect in the wound-healing assay at 48 hr. The present results agreed with previous reports in that moscatilin [**60**], a bibenzyl derivative, possesses strong cytotoxic activity.

Finally, the presence of bibenzyls, phenanthrenes and fluorenones in *D. brymerianum* could be useful information for the chemotaxonomic study of plants in the genus *Dendrobium*. The cytotoxicity and anti-migration effect of the isolated compounds suggested that this plant might be a promising source of new anticancer drugs.