Research on vegetation, where *Hoya purpureofusca* grows, has done in the Selabintana resort, Mount Gede Pangrango National Park in September 2011. Purposive random sampling was set up for a total of 18 square plots of 10 m x10 m, where placed on two different sites. Nine plots were placed in the growing sites of *H. purpureofusca*, otherwise were placed in other sites. Observation was made in each sampling plots on the number of species at three stages, i.e. seedling, sapling and tree in each sampling plots. The diversity indices (including species richness, heterogeneity, and evenness) were analyzed using Jakcknife index, Margalef index, Menhinick index, Simpson index and Shannon-Wiener index. Species dominance was analyzed by important value index and similarity index whereas species associations was analyzed by chi-square. Based on the analyses, there were differences on vegetation composition and diversity between growing site of *H. purpureofusca* and non growing site. *Schima wallichii* (DC.) Korth. is the dominant species that has an important role for the growth of *H. Purpureofusca*. 