# CHAPTER V
# CONCLUSION

1. *Agrobacterium* –mediated transformation can be used to transform pCAMBIA5305*hpt*-vector, pCAMBIA5305 and pCAMBIA5305*hva*1 into *indica* rice variety *O. sativa* cv. KDML105.

2. Transformation efficiency of callus co-cultivated with *A. tumefaciens* EHA105 (pCAMBIA5305*hpt*-vector) for 2 and 3 days revealed by green fluorescence was 9 and 16%, respectively.

3. The transformation frequency obtained in $T_0$ plants that stably expressed GFP for pCAMBIA5305 was 5.5% of 10 min infection / 2 days co-cultivation and 4% of 15 min infection / 3 days cocultivation, respectively.

4. The expression of GFP and its inheritance were stable in $T_1$ progeny.

5. Transformation efficiency of callus co-cultivated with *A. tumefaciens* EHA105 (pCAMBIA5305*hva*1) for 3 days revealed by green fluorescence was 1.8, 2.7 and 2.2% when selected on 6, 8 and 10 mg/l glufosinate, respectively.

6. The transformation frequency obtained in $T_0$ plants that stably expressed GFP and *hva*1 (level mRNA) for pCAMBIA5305*hva*1 was 0.54%.

7. Albino $T_0$ progeny was not found GFP and *hva*1 for pCAMBIA5305*hva*1

8. The transgenic nature of putative transformed rice $T_0$ plants was comfirmed by detection of GFP , PCR and RT-PCR analysis of *gfp* gene revealed all of them were transgenic plants.