

Fig. 1 (a) Germination of *Citrus mitis* seed (b) Aseptic seedlings of *Citrus mitis*

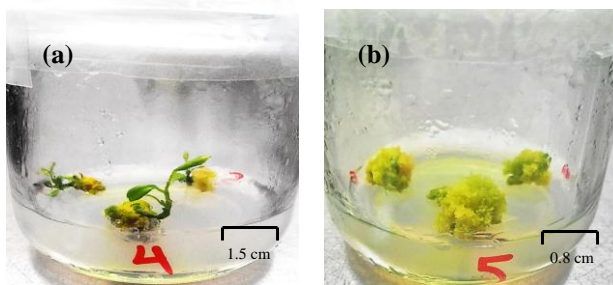


Fig. 2 (a) Shoot produced from stem explant cultured on MS medium supplemented with 0.5 mg/l NAA + 1.0 mg/l BAP (b) Callus produced from stem explant cultured on MS medium supplemented with 1.5 mg/l NAA + 0.5 mg/l BAP

IV. CONCLUSION

Micropropagation of *Citrus mitis* was successfully achieved. Through plant tissue culture system, propagation of this plant species could be achieved. Plant growth regulators play important role in inducing and enhancing growth of shoots, callus and roots in vitro. Through this study, mass propagation of *Citrus mitis* could be achieved apart from the problems paced from conventional planting.

REFERENCES

- [1] Benedict, J., Crowley J., Enocksson, A., and Verdant B. (2014). *Philippine Calamansi Association*, Inc. Cornell University.
- [2] Harley, I.M., Richard, S.B., Verginia, E.S. (2006). Citrus (citrus) and Fortunella (Kumquat), Rutaceae (Rue Family), *Species Profile for Pacific Island Agroforestry*.
- [3] Jabatan pertanian Putrajaya Malaysia (2015). *Statistik Tanaman Herba Dan Rempah Ratus*.
- [4] Parthasarathy, V.A., Anjan Barua, Venketaswarny N. And Utpala Parthasarathy. (2015). Effect of cytokinin on morphological, physiological and biological of shoots of citrus in vitro. *Cirad/EDP Sciences*. 57(3), 153-160.
- [5] Sim, G.E., Goh, C.J. and Loh, C.S. (1989). Micropropagation Of Citrus Mitis Blanco-Multiple Bud Formation From Shoot And Root Explants In The Presence Of 6-Benzylaminopurine. *Plant Science*. 59, 203-210. [https://doi.org/10.1016/0168-9452\(89\)90138-6](https://doi.org/10.1016/0168-9452(89)90138-6)
- [6] Mahadi, I., Syafi'i, W. and Sari Y. (2016). Induksi Kalus Jeruk Kasturi (*Citrus microcarpa*) Menggunakan Hormon 2,4-D dan BAP dengan Metode in vitro. *Jurnal Ilmu Pertanian Indonesia (JIPI)*. 21 (2), 84-89. <https://doi.org/10.18343/jipi.21.2.84>
- [7] Azim, F., Ramham, M.M., Shamsul, H.P., Saif, U.S., Nayem Z. and Ashrafuzzaman (2011). Development Of Efficient Callus Initiation Of Malta (*Citrus sinensis*) Through Tissue Culture. *International Journal of Agricultural Research Innovation & Technology*. 12, 64-68).
- [8] Sharma, H. (2017). Growth Regulators in Micropropagation of Woody Olansts. *International Journal of Advanced Reserche*. 5(2), 2378-2385. <https://doi.org/10.21474/IJAR01/3421>

- [9] Adhikarimayum H., Kshetrimayum G., Huidrom S. and Maibam D. (2011). In vitro propagation of *Citrus megaloxycarpa*. *Environmental and Experimental Biology*. 9, 129-132.
- [10] Singh, I.P. (2012). Micropropagation In Citrus – A Review. *National research centre for citrus, India*. 23(1), 1-13.