

Tissue Culture of *Moringa oleifera* Lam



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Opinion

Moringa oleifera is a miracle tree. It contains vitamin, mineral, lipid, amino acid, quercetin and *moringin*. It is also known as an herbal medicine. It could cure many diseases, such as diabetic, cancer, hypertension, inflammation, etc. Since many people harvested this plant from nature, the existence of *Moringa* is decreasing. Therefore, it is important to propagate this plant by tissue culture method (micropropagation).

We have been propagating the *Moringa* in plant tissue culture laboratory. For micropropagation, the explant used was nodes. The nodes were grown from seeds. Figure 1 shows the seeds of *Moringa oleifera*. The explant could grow into shoot and root. Murashige and Skoog medium with Gamborg vitamin was used

for germinating the seeds. Thereafter, the nodes were isolated and grown in the shoot initiation medium (SIM). The SIM was the same as germination medium with the addition of 2 ppm BAP (Benzyl Amino Purine). Thereafter, the growing shoots were multiplied in shoot multiplied medium (SMM). The SMM was the same as SIM. As for rooting, 1 ppm of IBA (Indole Butyric Acid) was supplemented in rooting medium (RM). After root was growing, the plantlets were established. Figure 2 shows the plantlets of *Moringa oleifera*. From this research, we can acclimatize *Moringa* plantlets and transfer the plants to the field. Hopefully, the *Moringa* plants could survive and propagate by themselves in nature. In my opinion, tissue culture of *Moringa oleifera* is easy and will give a benefit for *Moringa* plantation.



Figure 1: Seeds of *Moringa oleifera*.



Figure 2: Plantlets of *Moringa oleifera*.



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