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Summer Field School [Online] on
MOUNTAIN ECOSYSTEMS AND RESOURCE MANAGEMENT
Ivano-Frankivsk Region, Ukraine :: 19-28 September, 2021

DELEGATE PARTICIPANT'S PROFILE

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Highest Education	Bachelor in Agricultural Science with Honours (Horticulture and Landscaping)
Personal Statement	Dear colleagues! First of all, I extend my heartfelt thanks to the Universiti Putra Malaysia for providing me this opportunity to participate in the forthcoming Summer School on 'Mountain Ecosystems and Resource Management' as a delegate participant. I hold a Bachelor in Agricultural Science with Honours (Horticulture and Landscaping) from Universiti Malaysia Sabah, Malaysia. My Bachelor thesis was on 'Effect of blue-red LED illumination on growth and morpho-physiological performance of leguminous microgreens'. Currently, I am further study at Universiti Putra Malaysia, Malaysia as a postgraduate student. My academic interests include agronomy as well as waste upcycle.
Paper/Presentation Title (Unpublished Research or Review or Field Work)	*Effect of Biopriming with Food Waste Bokashi Leachate on* Basella rubra *L. Seed Germination and Root Growth Performance*
Keywords	Food Waste Bokashi; Biopriming; Seed Germination; Priming Duration; Priming Concentration
Abstract (100-300 words)	*Basella rubra* L. is a type of spinach, which is edible with high nutrient composition. It is also known to be antioxidant. However, initial germination and root growth remain an issue due to hard exterior seed coating, thus some may germinate within 10 to 21 days, and some may not at all. Inhibited growth may lead to

	vegetative propagation and micropropagation, which fundamentally reduce the growth and yield. *Basella* seed treated with Bokashi leachate found to improve seed germination and root growth. Thus, a study was conducted, using food waste EM Bokashi leachate (0%, 0.067%, 0.1%, 0.2%) with biopriming duration (6 and 12 hours). Experiment was conducted in completely random design (CRD) with 3 replications of 100 seeds, with a total of 24 experimental units. Based on the results, short biopriming duration (6 hours) significantly enhanced the mean germination rate, germination speed accumulated and coefficient of the velocity of germination. However, germination percentage had no significant improvement by leachate. Long priming duration significantly reduced the root development due to the seed may loss of desiccation tolerance. The concentration of leachate and priming duration had no significant interaction. In order to improve the germination and root growth performance, 6 hours of seeds priming duration or 0.2% (1:500) of food waste Bokashi leachate was recommended to soak the *Basella rubra* seeds.
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