

combination of compost with NPK obtained of value IBCR <1 that classified as unfit, unless the B₂F₃. Formulation biochar 10.52 t ha⁻¹ with compost and NPK (B₂F₃) provide IBCR value of 1.27 is classified as a viable and profitable for the yield of a corn crop. The low value of IBCR on compost, because due fees for the purchase of compost is very large while the effect on the yield of corn in the first harvest is still low.

The application of biochar-compost will have a substantial effect on poor soil fertility and the direct economic value of the harvest as compost in the biochar-compost mixture has the potential to increase nutritional deficiencies in the soil. On the other hand, biochar applications can be effective in medium fertility soils in terms of storage of nutrients and water, plant productivity, and carbon sequestration. Long-term biochar field investigations to absorb CO₂ in the atmosphere, the role of microbes in the oxidizing biochar surface and the release of nutrients, the carbon surface properties of the soil environment, the biochar nutrition ratio to the biochar-compost, type, and rate of biochar applications. Short-term and long-term evaluations of biochar should complement each other, therefore it is important to evaluate the biochar and compost both developed from the same raw materials as part of future research lines [25].

IV. CONCLUSION

The dosage of bamboo biochar 10.52 t ha⁻¹ combined with compost 20.22 t ha⁻¹ and NPK 313.37 kg ha⁻¹ can increase the availability of P and K, the total of soil microbes, improving the distribution of micropores and improving soil quality to be very good with a value SQR 18.

The dosage of bamboo biochar 10.52 t ha⁻¹ combined with compost+NPK given the highest yield of 12.84 tons to the dry weight seed-corn per hectare water content 14% that increased by 38.61% when compared to the interaction without biochar with compost and NPK. The highest yield of 12.84 tons obtained on the combination of biochar 10.52 t ha⁻¹ with compost+NPK with a value RAE high of 119.69% with IBCR of 1.27 classified as very effective, feasible and favorable for corn crops in dryland.

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