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# Formulation of Indigenous Trichoderma harzianum Th-B18 on the Growth and Yield of Shallot (Allium ascalonicum L.) in Pb-Contaminated Media

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#### **Abstract**

This study was conducted to test several indigenous Trichoderma harzianum Th-B18 formulations to determine their effects on the growth and yield of shallots on Pb-contaminated land, in an effort to increase shallot productivity. This study used a Completely Randomized Design (CRD) with a single factor with four levels. The treatment of T. harzianum Th-B18 formulations were tested on shallots planted in polybags contaminated with lead, namely control (without treatment; indigenous T. harzianum formulation in the form of Breynia androgyna (sweet leaf) pellets, dose 3 g.polybag<sup>-1</sup>; indigenous T. harzianum Th-B18 formulation in the form of dry corn rice, dose 3 g.polybag<sup>-1</sup>;

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commercial Trichoderma formulation in the form of solution, 10 mL.polybag<sup>-1</sup>, all of which were applied o days after planting. The treatment of the indigenous Trichoderma harzianum Th-B18 fungi formulation had a significantly different effect on the leaf length variable. In the observation of leaf length 14 and 63 days after planting, the formulation of T. harzianum Th-B18 sweet leaf pellets 3 g. polybag<sup>-1</sup> (+ 10 grains)showed the longest leaf length and was significantly different from the treatment without T. harzianum Th-B18, formulation of T. harzianum Th-B18 solid dry corn 3 g.polybag<sup>-1</sup> and liquid formulation of T. harzianum commercial product 100 mL.polybag<sup>-1</sup>. The best formulation of indigenous T. harzianum Th-B18 fungus on the growth and yield of shallots on Pb-contaminated land was the formulation of T. harzianum Th-B18 sweet leaf (Sauropus androgynous) pellets 3 g.polybag<sup>-1</sup>. © 2025 by the authors Licensee: Technoscience Publications.

## Author keywords

Allium ascalonicum L; Pb-contaminated media; Trichoderma harzianum Th-B18

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