

Production of Compost using Thermophilic Fungi *Mycotypha* sps Strain No. AKM-1801, from Coffee Husk and Its Impact on Plant and Soil

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SUMMARY

Coffee cherry husk is one of the major by product of coffee industry. Due to the presence of polyphenolic material and highly acidic pH, its management has been a tough task. *Mycotypha* sps. Strain No.AKM -1801, a thermophilic fungi isolated from coffee husk heap helps in converting coffee husk into Compost. Studies indicated that the pH of the husk changed from 3.6 to 8.4 in 20 days. Investigation revealed that the compost increased the germination percentage and Vigour index on various plants like. *Pisum sativum*, *Arachis hypogea*, *Brassica nigrum*, *Dolichos lablab*, *Dolichos biflorus*, *Phaseous aureus*, *Vigna sinensis* and *Vigna catjang*. The Compost showed accelerated growth of the plant in pot and field experiment due to the production of phytoharmones. These Phytoharmones are yet to be identified. The plantation soil being highly acidic, addition of lime to stabilize the pH is a common practice. Our effort to amend the pH of the soil using this Compost showed promising results. Incorporation of this compost even at 2.5% level neutralized the pH of the soil for one cropping season. A detail investigation on long-term effects of soil amendment is under progress.