

**PROPOSING THE GOOD POULTRY MANURE
MIXTURE FOR COMPOST TO PLANT
GROWTH**

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ABSTRACT

As the poultry industry farmers are faced with the challenge of disposing of increasing volumes of poultry litter and hatchery wastes. Composting is one option that producers should consider as a way of increasing the value and potential markets for their litter, while moving excess nutrients from their operations. Composting has been used as a means of recycling organic matter back into the soil to improve soil structure and fertility. The composting process has received much attention in recent years because of pollution concerns and the search for environmentally sound methods for treating waste and producing the vegetable product from available waste resources. Therefore, this experiment was carried out with the objectives of promoting the good poultry manure mixture for compost to plant growth from different poultry wastes by increasing economic value poultry wastes through chilli yield and finding out suitable combination of compost and which could give an economic yield of chilli. The experiment was conducted within poultry farm and hatchery wastes such as litter, eggshells and non-fertile eggs by using the chilli plant seedlings to observe the growth. Chilli seedlings were distributed in a completely randomized design, with three types of compost as three treatments (T1 = Litter compost; T2 = Litter with eggshells compost; T3 = Litter with non-fertile eggs compost). Three repetitions per treatment were conducted, and the black colour polythene bags were used as an experimental unit. Each replication unit was filled with three types compost as three replication from each treatment and three chilli seedlings were used as in a replication unit. For the test, pH meter and ruler was used. Rule was used to measure the height of the chilli plant and produce the valuable organic fertilizers to farmers to the crop production to the economic yield.

Key Words: Compost, Chilli seedlings, economic value, economic yield.