Influence of Dead Sheep Compost Material on the Growth of Leafy Vegetables in Kuwait Under Greenhouse Conditions

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Mortality composting of dead sheep is a new venture in Kuwait targeted at effective disposal of the carcasses and utilizing it as nutrient for soil to enhance agricultural crop productivity. Mortality composting has proved more viable and cost-effective solution for proper recycling and utilization of dead sheep. Attempts were taken to exploit the compost generated from dead sheep as substrate for two major leafy vegetables (Chinese Kale (Brassica oleracea cv. Blue star) and leaf lettuce (Lactuca sativa cv. Romaine-ROUGE d'HIVER). Mortality sheep compost was prepared with fine, medium and coarse saw dust as substrate as well as using a rotary ecodrum composter and used along with Peatmoss:Perilite in the ratio 1:1:1. Commercially available compost was used as standard for comparison and soilless medium without compost served as the control. The results revealed that plants grown in compost prepared by Ecodrum provided better results in terms of plant characteristics in both the crops viz., Chinese Kale and leaf lettuce and provided a solution for increasing the yield of crop plants grown in container pots. However, further chemical analysis is required for improving soil quality and enhanced soil productivity in larger scale.

Keywords: Compost, Chinese Kale, Ecodrum, Dead Sheep, Leaf Lettuce