

toxicity problem of paddy field and weeds in tea and cinnamon fields. Many broiler farmers (71%) and 27% of the layers farmers admitted that free disposal of spent litter is practiced, at least sometime. However, adverse environmental effects of indiscriminate spent litter disposal were better known by broiler farmers than by layer farmers. All the broiler farmers accepted that free disposal of spent litter caused environmental problems; only 36% of the layer farmers accepted that fact. Only 14% of the farmers knew that excessive algae growth in water bodies is caused by free disposal of spent litter. When applied to paddy fields, farmers do not submerge the field for about two weeks after applying the spent litter, to prevent the excessive algae growth. It was concluded that the present methods of spent poultry litter utilization and disposal, practiced by small scale poultry farmers lead to severe environmental problems. The need of educating poultry farmers regarding the adverse effects of indiscriminate disposal and improper utilization of spent poultry litter and, proper utilization and disposal methods of the same is emphasized.

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Effect of different vermicompost and coir dust application on soil fertility

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Since organic farming is becoming popular in the recent years, application of vermicompost and coir dust in agricultural fields would draw a considerable interest. Application of coir dust is done either as a mixture with the organic manures like vermicompost or coir dust alone. Instead of using them alone, mixture of these two will have more practical values. Therefore, this study was undertaken to assess the best composition of vermicompost and coir dust in terms of soil fertility.

Different percentages of vermicompost and coir dust were used in making four different mixtures [100 % vermicompost (T1), 75 % vermicompost: 25 % coir dust (T2), 50 % vermicompost: 50 % coir dust (T3), 25 % vermicompost: 75 % coir dust (T4)]. Soil without vermicompost or coir dust served as the control. Soil pH, EC, N, P and K contents were determined using standard methods at 3, 7, 14, 21, 28, 35, 42, 49, 56, 63 and 70 days after treatment. A Completely Randomized Design (CRD) was used for the experiment with four replicates. Data were statistically analyzed using SAS package.

According to the results, soil pH and EC values were higher in T3 and T4 than those of other treatments. This would be due to the alkaline nature of vermicompost and its high concentration of soluble salts. As higher proportions of vermicompost could increase soil pH and EC values, it seemed to be better to apply as a mixture with coir dust. N status of the soil was proved to be better in T2. However, repeated application of this mixture needed to be done to obtain better results. Total N, P and K in the different treatments has shown higher variation. T1 has the highest values and it is also has a higher variation during the study period. Vermicompost contains relatively high levels of organic carbon and thus slowly releases the nutrients to the medium. Therefore the nutrient depleting rate seemed to be less with time.

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Environmental impact on water quality in Bolgoda Lake Bank-Madapatha

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The present study was carried out in Bolgoda lake bank area at Madapatha, Piliyandala in Kesbewa UC in Colombo district. The objective of the study is identifying the surface and groundwater physical and chemical parameter changers due to influence of Bolgoda Lake. Geomorphologically the study area is a flat land with elevation change from 1.2 to 2m from mean sea level (MSL). Water bearing sand in top of the section is more often clay with small portion of sand and lower section usually has sandy clay with laterite.

Very shallow small surface water bodies (pond) are available closer to Bolgoda Lake and area close to lake of the