

B-52: Organic matter status of some cultivated soils in the Dry Zone

K M A Kendaragama, G W I Chandrasiri, A S G de Silva
(*Field Crops Research and Development Institute, Maha Illuppallama*)

This study was aimed to determine organic matter content and its distribution in 4 soils namely Reddish Brown Earth (RBE), Low Humic Gley (LHG), Non Calcic Brown (NCB) and Regosol soils which are being intensively used for crop cultivation in the Dry Zone of Sri Lanka. For this purpose, 739 composite soil samples collected from 0-20 cm depth of farmer fields under the Soil Testing Service of the Department of Agriculture were used. These soils consisted of 250, 294, 134 and 61 samples from RBE, LHG, NCB and Regosol soils respectively. The organic matter content of soils was determined by the Walkly - Black procedure.

Results showed that mean organic matter content was 1.8, 2.2, 1.3 and 0.54 % in RBE, LHG, NCB and Regosol soils, respectively. Organic matter content of the samples between 25th and 75th percentiles ranged between 1.4 - 2.1, 1.5 - 2.4, 0.96 - 1.6 and 0.42 - 0.63 in RBE, LHG, NCB and Regosol soils, respectively. It reveals that organic matter content of above soils is generally low and varies within a narrow range. It should be taken into consideration in fertility management of these soils.