

THE IMPACT OF GYPSIFEROUS AND CALCAREOUS SOILS ON DECOMPOSITION OF DIFFERENT ORGANIC MATERIALS .

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ABSTRACT

laboratory experiment was conducted to study the effect of soil type and kind of organic matter on the decomposition of organic matter .Soils of different type (Gypsiferous 15% gypsum , calcareous 20% lime) for each has used two kind of organic wastes (sheep waste and cow waste at level of 20 with respect of soil organic carbon and without addition of OM to control treatment.

Factorial experiment were carried out in completely randomize design (CRD) in three replicates.

Treatments were incubated at 30 (\pm 2) c for 77 days and the amount of released CO₂ were determined in followed period, from 1-7 days determined in all day and From 8-77 days determined in 7 days.

The study showed of following result.

The calcareous soil gave higher accumulative quantity of released CO₂ comparing with gypsiferous soil , the soil treatment were as follow Treatment of sheep waste < treatment cow waste < control .

The period 1-14 days gave higher amounts of CO₂ from other period.

Key word: organic matter , release of CO₂, gypsiferous and calcareous soil .