

Role of Termites in Organic Farming



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Termites are small antlike Social Soil animals of the order of Isoptera



Popular Image

Termites are notorious for their voracious appetite for lignocelluloses i.e. timber, wood, cotton, jute and paper etc causing damages more than earthquake and fire.

Otherside of popular Image



Termites are important in rehabilitations of degraded soil, survival of forest by recycling nutrients taken from soil by trees and plants

Own experience

(not research /experiment)

I stumbled upon natural phenomenon termite activity in post harvest kharif Jawar plot which remained untouched from Nov. 1999 to May 2000. During this period whatever crop residue and other rotting vegetation was there completely recycled



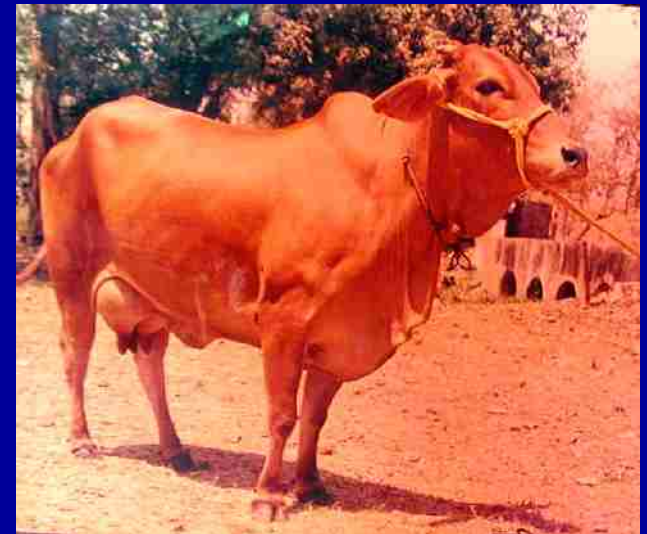
***Only one harrowing in last
week of May 2000***

The plot of land was ready for sowing
the soil is Vertisol on Deccan plateau
which is rainfed.

Cows plays very pivotal role in organic farming



**Termites
are
just like
cows**



Termites like cows have a series of stomachs

Each harbouring two major bacterial lineages
treponemes and fibrobacters. Fibrobacters have
in relative in the cow rumen



The mandibles of the insect chomp the lignocellulose in to bits but the real work is conducted in the dark recesses of the bellies just like rumen



U.S.Dept. of Energy Joint Genome institute et al

The bellies of tiny beasts harbour a goldmine of microbes that have now been tapped as rich sources of enzymes for converting lignocelluloses to organic manure and biofuel.

**U.S. Dept. of Energy Joint Genom institute ,caltec
Institute and others**

Termites mound and trees



Termite Mound and Acacia tree



Majestic view of same Acacia Tree

Termite Mound and young Mango Tree



Termite Mound and Gauva



Termite Mound and Eucalyptus Tree



***Termite Mound and 15 year old mango
Tree with un-pruned crown***



***Termite Mound twin mango Tree of
10 years age***



Infant *and* Developing *Termite* *Mound on bunds*



Thanks

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