COMMENTS AND LETTERS TO THE EDITOR

Dithionite-Citrate-Bicarbonate Procedure (DCB) for Iron Removal

The paper by Johnson and Yeh (1974) gives yet another abbreviation (DCB) for the dithionite-citrate-bicarbonate procedure (Mehra and Jackson, 1960) for iron removal from soils. Others give various abbreviations such as CBD (Weaver, Syers, and Jackson, 1968), SDCB (Dudas and Harward, 1971), and DCB (Borchardt, Harward, and Knox, 1971). Perhaps, after 15 years usage of a very popular method, we should agree on an abbreviation. I suggest the abbreviation, DCB, because it is consistent with the title of the original paper (Mehra and Jackson, 1960) and also presents the reagents in the general order of their importance.

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Literature Cited


On the “Priming Effect” of Organic Materials

“Priming effect” is defined as a change in the decomposition rate of native soil organic matter caused by fresh additions of organic residues and may be positive or negative (9, 10). Very recently Dr. Sørensen (18) related the positive priming effect to the increased biological activity of special groups of microorganisms (or enzymes) produced in the soil during decomposition of the added organic material. The following objections can be raised against this explanation:

1) What is the nature of the special organisms (or enzymes) which are developed in soil during or after decomposition of added organic materials? Cannot they be identified, separated, multiplied, and tested for their efficiency?

2) Even if one believes in the existence and development of special microorganisms, how does the soil organic matter which is otherwise biologically resistant become susceptible to microbial decomposition? In other words what is the mechanism(s) of their action?

3) Why is there a stimulation at one time and a retarda-

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