values. Field recommendations can then be made from these results.

The overall objective of this thesis was to evaluate the AE and Yuan DB methods on Florida's sandy soils. These are the only two methods being evaluated because of the following reasons:

1/ There is a desire for collaboration between state soil testing laboratories, thus the desire to keep the tests as similar as possible, possibly sacrificing some accuracy.

2/ There may be a push in the future for DB methodology, so these methods should continue to be evaluated.

The thesis is divided into five parts. Chapter II reviews the literature pertinent to the study. Chapter III presents the laboratory incubation study designed to evaluate the AE and Yuan DB methods. Chapter IV relates the laboratory data to actual field responses. Chapter V relates the results from the incubation study to a wider range of Florida soils to determine the wider applicability of the AE method. Finally Chapter VI summarizes the study and provides recommendations for further work.