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**LOAD SETTLEMENT BEHAVIOUR
OF BAKAU PILE**

BY
AHMAD FAUZI B MOHD YUSOF
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Ahmad Fauzi Mohd Yusof
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TABLE OF CONTENT

<u>TITLE</u>	<u>PAGE</u>
ACKNOWLEDGEMENT	i
SYNOPSIS	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF PLATES	viii
LIST OF SYMBOLS	ix
 CHAPTER ONE : INTRODUCTION	
1.1 Introduction	1
1.2 Objectives	3
1.3 Scope of study	3
 CHAPTER TWO : LITERATURE REVIEW	
2.1 Bakau forest in Malaysia	4
2.2 Bakau timber	6
2.3 Bakau piles	7
2.3.1 Bakau Minyak (R. Apiculata)	9
2.3.2 Bakau Kurap (R. Mucronata)	10
2.4 Uses of bakau pile	11
2.5 Determination of pile load carrying capacity	13
2.6 Bearing capacity of single pile	13

SYNOPSIS

Bakau pile has been use as a foundation system in area with high ground water table to carry light loads. Prediction of the bearing capacity of driven bakau pile is complicated by several factors, including the technical problem in soil sampling and testing, the significant changes in soil properties, etc.

For this reason, routine pile capacity design is largely empirical in nature, making use of correlation between in situ test, e.g. standard penetration test (SPT) and data evaluated from field loading test on pile.

This study is going to discuss on the load settlement behaviour of bakau pile with different groups and spacings from which full scale load test been carried out and various approaches used to predict the bearing capacity and efficiency of that group.

CHAPTER ONE - INTRODUCTION

1.1 INTRODUCTION

Piles are vertical or slightly slanting structural foundation members, having relatively small cross-sectional dimensions with respect to their length. They are introduced into the soil and transmit the loads and forces acting on the superstructure to the subsoil. The length, method of installation, and way of acting of piles can vary greatly, and thus they are easily adaptable to various conditions and requirements.

The major function of piles is to transmit foundation loads through relatively weak or loose soil strata to stiffer underlying soil or rock strata.

To solve foundation problems, use of piles generally comes up in the following cases:

- (a) a soil layer having a reliable bearing capacity can be found at greater depth only;
- (b) the layers immediately beneath the structure can be washed out, scours may occur;
- (c) for construction where the superstructure transmits great concentrated loads to the foundation;
- (d) for structures transmitting unusually high vertical and/or