EFFECT OF DIFFERENT CONCENTRATIONS OF ALAR [butanedioic acid mono (2,2-dimethylhydrazide)] APPLIED AT THREE DIFFERENT TIMES ON THE GROWTH AND YIELD OF PEANUT

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A Masteral Thesis submitted to the Faculty of the Institute of Graduate Studies, Central Luzon State University, Muñoz, Nueva Ecija, Philippines in partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE IN CROP SCIENCE
(Agronomy)

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This thesis entitled, **EFFECT OF DIFFERENT CONCENTRATIONS OF ALAR [butanedioic acid mono (2,2-dimythlhydrazide)] APPLIED AT THREE DIFFERENT TIMES ON THE GROWTH AND YIELD OF PEANUT**, prepared and submitted by TAWEE BOONPHIROM in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE IN CROP SCIENCE (Agronomy)**, is hereby accepted.

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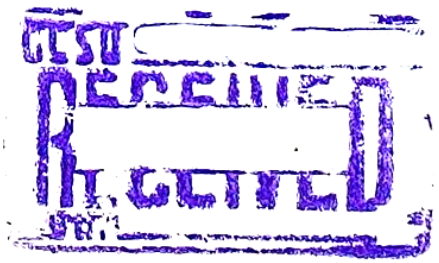

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BIOGRAPHICAL SKETCH

The author was born on March 3, 1962 in Pattanee Province, Thailand. He is the fourth of five children of Mr. Luan Boonphirom and Mrs. Pime Boonphirom.

He finished his primary education at the Napradu School in 1977 and high school at Phokereratchsuksa School in the same province. After finishing high school in 1980, he studied at Narathiwas Agricultural College, Narathiwas Province, where he obtained preliminary vocational education in 1983. He obtained a Diploma in Agriculture at the Institute of Technology and Vocational Education, Nakornsethummarat province, in 1985. He graduated with the degree of Bachelor in Plant Science, Major in Agronomy at Maejo Institute of Agricultural Technology, Chieng-mai, Thailand, in 1987.

After graduation, he joined the Department of Land Development at Bangkok for one year. Then, he transferred to the Department of Vocational Education at Kampheangphet Agricultural College, Kampheangphet Province.

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TAWEE BOONPHIROM

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ABSTRACT

BOONPHIROM, TAWEE. Institute of Graduate Studies, Central Luzon State University, Muñoz, Nueva Ecija, Philippines, May 1994. **EFFECT OF DIFFERENT CONCENTRATIONS OF ALAR [butanedioic acid mono (2,2-dimethylhydrazide)] APPLIED AT DIFFERENT TIMES ON THE GROWTH AND YIELD OF PEANUT.**

Adviser: Dr. Danilo T. Eligio

The effect of Alar concentrations at different times was evaluated using pots in a Factorial Experiment in Completely Randomized Design with three replications. The concentrations were: 0, 1,000, 5,000 and 10,000 ppm while the times of application were: 30, 40 and 50 days after emergence.

Flowering occurred 26 to 28 days after emergence. Harvesting started 121 days after emergence for all the treatments. Leaf size was not affected by the treatments. However, number of filled pods significantly increased while the unfilled pods significantly decreased with increasing concentration of Alar. Shelling percentage and weight of both seeds and shell increased with 5,000 ppm applied 50 days after emergence, hence, this treatment combination obtained the highest yield of 4.11 *tons/ha.*

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