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DEVELOPMENT AND EVALUATION OF A FORAGE CHOPPER

JOHNEIL A. BAWAG

SCHOOL OF ENGINEERING

DON SEVERINO AGRICULTURAL COLLEGE

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DEVELOPMENT AND EVALUATION OF A FORAGE CHOPPER

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JOHNEIL ANGCAO BAWAG

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ABSTRACT

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Adviser: Engr. Camilo A. Polinga

The forage chopper was developed and evaluated at the School of Engineering, Don Severino Agricultural College, Indang, Cavite. The basic parts of the machine were; feeding tray, feeder, blade, discharge chute and stands. The addition of the feeder in the chopper effect the chopping performance of the machine. The developed Forage chopper can chopped forage up to 218.6 kg/hr. at 1,200 rpm. The length of the chopped forage from the developed machine was 2 cm to 5.7 cm.

The initial cost of the machine was P 14,054.00 which can be recovered within 5.08 months. The relative advantage of the developed forage chopper in terms of capacity was 364.33% over the manual chopping of forage. It is evident that using the developed forage chopper is more advantageous than manually chopping in terms of capacity.

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DEVELOPMENT AND EVALUATION OF A FORAGE CHOPPER^{1/}

by

JOHNEIL ANGCAO BAWAG

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INTRODUCTION

The forage chopper is a regularly used piece of equipment on livestock farms. Feeding ruminance with chopped forage is more economical than free self-grazing, since grass can grow faster for the next cutting and animals are more easily managed. This is especially true for small livestock farmers or those who practice integrated crop-livestock farming. Choppers can also be used for comminuting farm residues for mulch, green manure or into raw materials for paper making.

Different forage materials have different length requirements. The same is true with different animals. Grasses without the stem can be served with longer cuts to goats or cattles. However, goats can not eat corn stover