

***Design of multifunctional chopper machine
to dwarf elephant grass and goat manure
Supervised by Rizza Wijaya, S.TP, M.Sc.***

Millani Ika Nardiati
*Agricultural Engineering Study Program
Department of Agricultural Technology*

ABSTRACT

*The farm subsector was one of the subsector that could be used for national economy improvement since giving contribution and increasing employees significantly. We could take an example as goat raising was one of the growing farms in Indonesia rapidly. Mastery of goat farming is still limited. Some effects of decreasing animal productivity are less education and mastery in that technology. The Chopper multifunction machine was a machine used for destroying animal feed and grinding goat feces in one unit machine. Gajah mini grass (*Pannisetum purpureum* cv. Mott) was one of the superior forage types as animal feed due to had a soft leaf, fast growth, smooth fur, soft stem, favored livestock, and rapid regrowth. Gajah mini grass contains nutritional and palatability as a source of animal feed. The function of animal feces is manure because contains nutrients such as nitrogen (N), phosphorus (P), and potassium (K), in addition, animal feces also contain calcium, magnesium, sulfur, sodium, and copper needed by soil and plant fertility. This last project aimed to make Chopper multifunction machine to help goat farmers more efficient, effective, and economic. The result of Chopper multifunction machine experiment was destroyed capacity of Chopper multifunction machine about 527,04 kg/hour and grinded capacity about 722,16 kg/hour.*

Key words: *Chopper machine, multifunction, dwarf elephant grass, goat manure.*