



Higher Polytechnic School of Chimborazo (In Spanish: Escuela Superior Politécnica de Chimborazo - ESPOCH)

Faculty of Livestock Sciences

A Thesis by Decsy Mariuxi Gualinga Ulcuango, April 2023

TRIBUNAL: Ing. Marco Bolívar Fiallos López (President); Ing. Santiago Fahureguy Jiménez Yáñez, MSc. (Work Director); Ing. Carlos Ramiro Santos Calderón Mgs. (Curricular Integration)

“EVALUATION OF A PASTURE OF Medicago sativa VAR. CUF 101 (ALFALFA) PLUS Plantago lanceolata (PLANTAIN FORAGE) USING CROP BOOSTER TECHNOLOGY AT THE TUNSHI EXPERIMENTAL STATION”

Abstract by Harvest Harmonics Corp, Worldwide Distributor of Crop Booster™ Technology

Overview

Following a successful science trial with Crop Booster technology in July 2021 another trial was conducted by an ESPOCH student team in 2023 led by student Zootechnical Engineer Ms. Decsy Mariuxi Gualinga Ulcuango in the experimental station of Tunshi in central Ecuador. She tested the effects of Crop Booster on the cultivation of alfalfa and plantain forage mix.

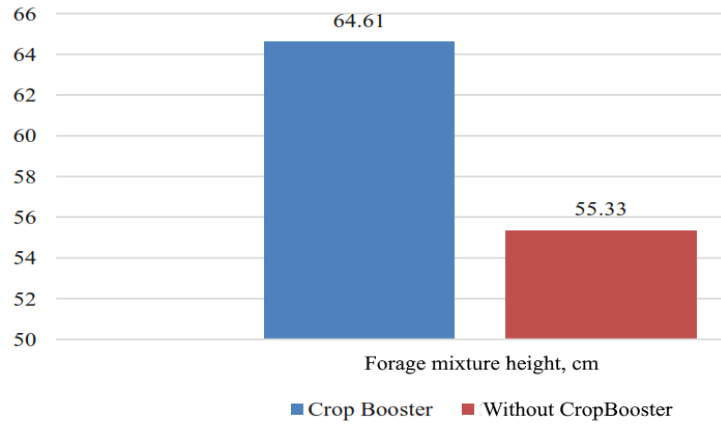
As seen in the results summary table below, based on Table1-3 in the Thesis, Crop Booster boosted all factors of growth and production. At the conclusion of the Thesis, the student Engineer also calculated and found positive Benefit/Cost ratios in all three cuts of the season, namely Day 30, Day 40, and Day 50.

Variable	Crop Booster	without Crop Booster	GAIN*
Forage Mix height	64.61 cm	55.33 cm	17%
Basal cover	15.11 %	12.56 %	20%
Aerial cover	23.72 %	19.33 %	23%
Production of GF (Green Forage)	19.00 t/GF/ha/cut	15.67 t/GF/ha/cut	21%
Production of DM (Dry Matter)	4.47 t/DM/ha/cut	3.13 t/DM/ha/cut	43%

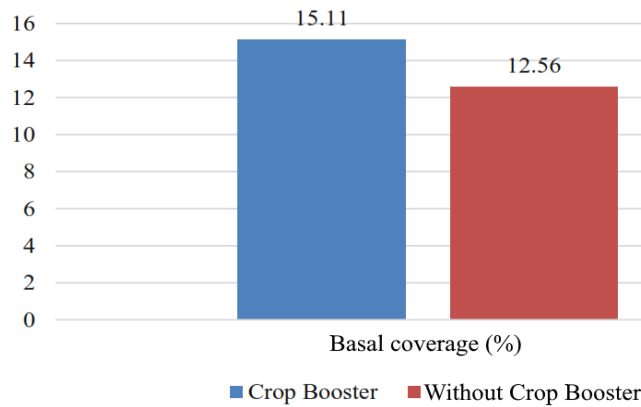
The complete Thesis, in Spanish, is attached below after this 4-page Abstract.

The graphs below show the major benefits discovered and calculated in the Thesis:

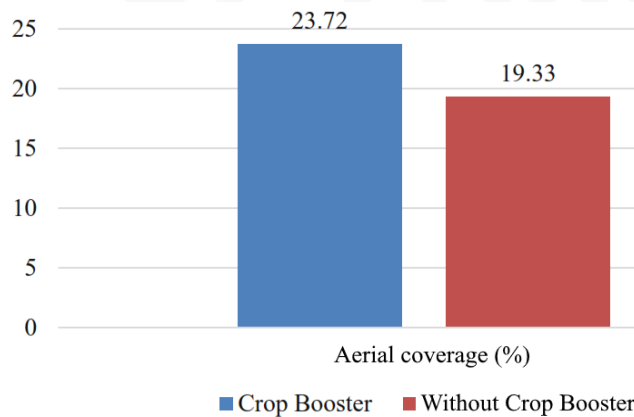




Graph 1-3: Height of the Forage Mix due to the Crop Booster Technology Effect

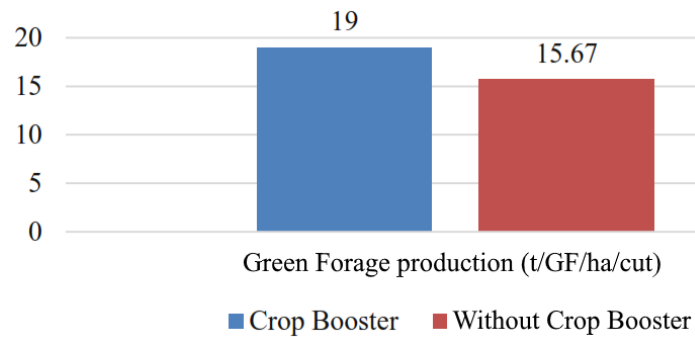


Graph 2-3: Basal Cover of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Crop Booster Technology Effect

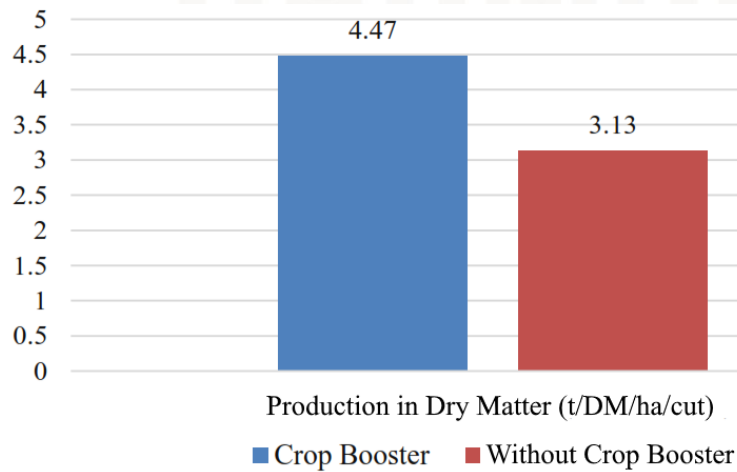


Graph 3-3: Aerial Cover of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Crop Booster Technology Effect

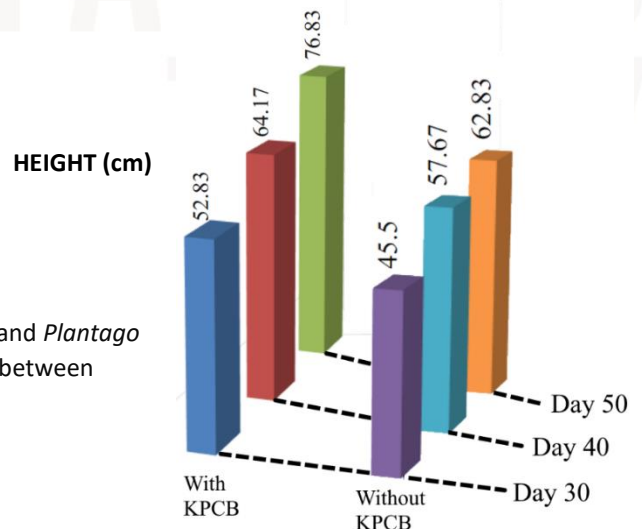




Graph 3-3: Aerial Cover of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Crop Booster Technology Effect

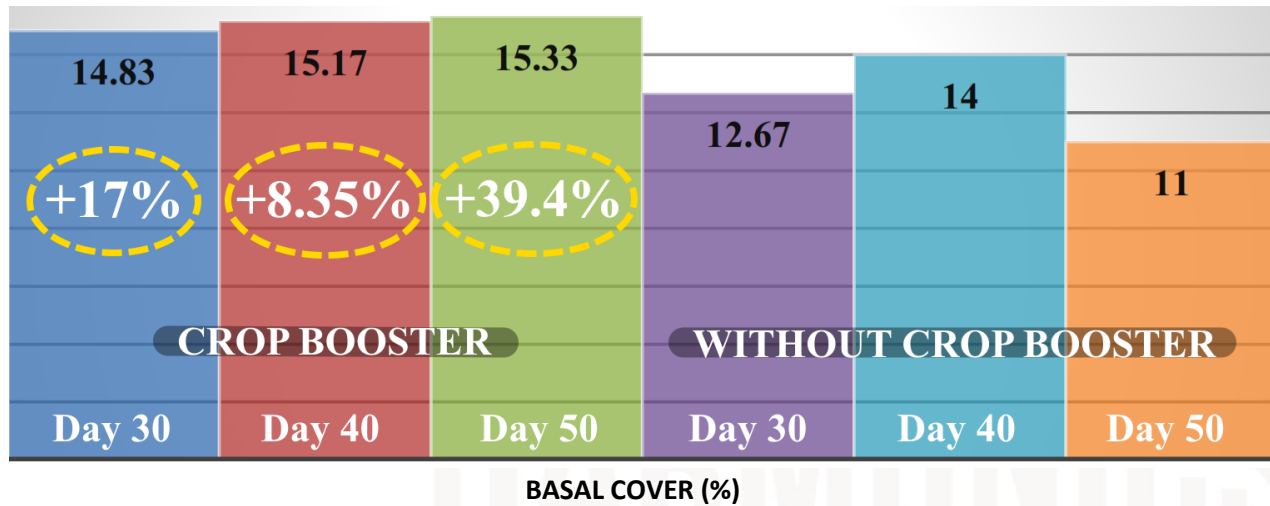


Graph 5-3: Dry Matter Production of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Crop Booster Technology Effect

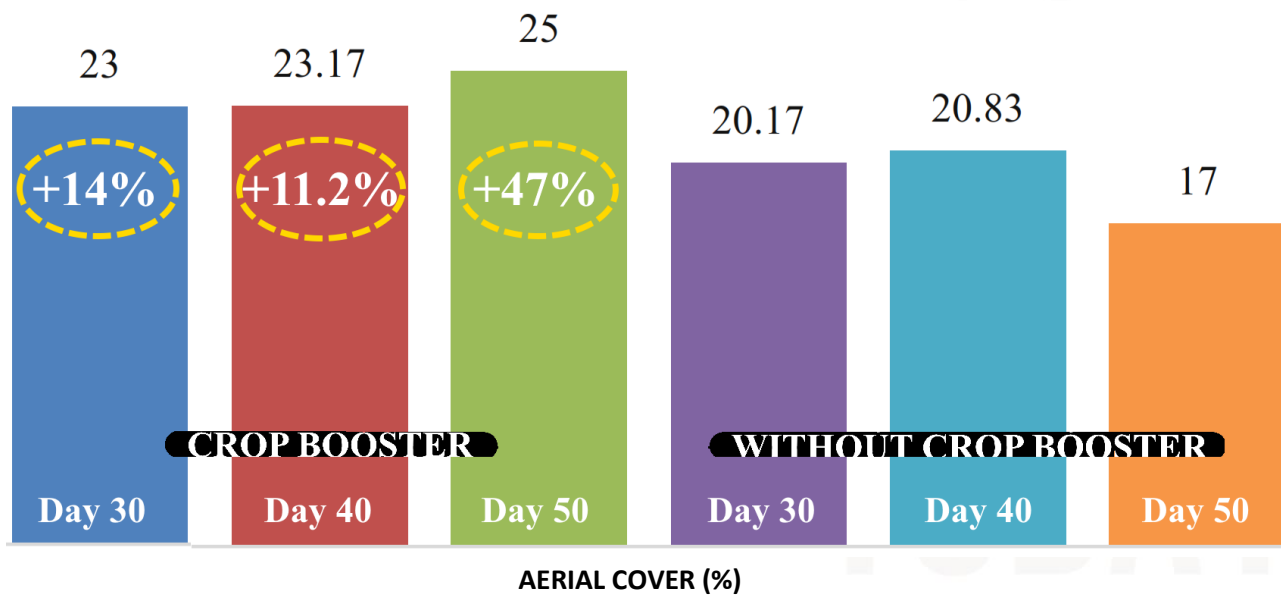


Graph 11-3: Height in cm of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Interaction between Technology and Cutting Age





Graph 12-3: Basal Cover of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Interaction between Technology and Cutting Age



Graph 13-3: Aerial Cover of the *Medicago sativa* and *Plantago lanceolata* Forage Mix due to the Interaction between Technology and Cutting Age

Source: <http://dspace.espace.edu.ec/handle/123456789/19577>

