



# State University of Maringá

## Department of Animal Science



### QUALITY OF HONEY *Apis mellifera* Africanized HOUSED IN BOXES LANGSTROTH TILED PET ECOLOGICAL OR FIBROAMIAN TO

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## INTRODUCTION

The rational creation of bees consists of an activity in which one can achieve good economic results, and social challenges. Therefore, it is necessary to look for practices that provide better conditions for the bee hives internal and external, to increase their productivity.

The cover meets basic functions such as protection against sun and rain. A new technology that can be studied to get results is to use PET green tile.

It is of paramount importance to ensure the quality of the honey bee, and it is required to conduct evaluations physico-chemical, microscopic and microbiological after harvest and during storage.

**OBJECTIVE** The following study aims to evaluate the quality of honey produced by *Apis mellifera* Africanized bees housed in boxes covered with green tiles and PET fibroamianto.

## MATERIALS AND METHODS

The experiment was conducted in the beekeeping industry, the Experimental Farm of Iguatemi (EIF), the municipality of Mandaguaçu. We used 8 boxes covered with green tiles PET and 8 boxes covered with tile fibroamianto arranged in parallel and alternate between them, staying in the shade and weather directly to weathering.

PET green tile was built by a square of wood measuring 70 x 85 cm covered first with tetra pak milk cartons and above this coverage, the PET bottles cut.

The collection of honey is made in the summer and early fall and were analyzed in the laboratories of Pharmacognosy and Microbiology, State University of Maringá and microscopic characteristics, physical-chemical and microbiological tests, following the recommendations contained in the Instruction of the Ministry of agriculture and Supply.



## RESULTS

Microscópicas	PET	Fibroamianto	MAPA
Grão pólen	presente	presente	presença
Grão amido	ausente	ausente	ausência
Cristal glicose	ausente	ausente	predominância
Partículas cera	ausente	rara	pode ter
Físico-químicas	PET	Fibroamianto	MAPA
Sujidade	fibras	rara (fibra e resto de abelhas)	
Lund (mL)	1,25	1,1	0,6 a 3
Winkler	0,768	0,96	máximo 60 mg/kg
Fermentos diastásicos	presente	presente	presença
pH amostra	4,62	4,72	3,42 - 6,10
Umidade (%)	15,6	16,6	máximo 20%
Acidez (meq/Kg)	28,28	29,29	máximo 50 meq/Kg
Cor	âmbar	âmbar	incolor - pardo
Microbiológico	PET	Convencional	MAPA
Bolores	1,5x10 <sup>2</sup>	2x10 <sup>2</sup>	1,0x10 <sup>2</sup> UFC/g
Leveduras	<1x10 <sup>2</sup>	<1x10 <sup>2</sup>	1,0x10 <sup>2</sup> UFC/g
Coliforme 35	<3	<3	<3,0 NMP/g
Coliforme 45	<3	<3	<3,0 NMP/g
Salmonela	ausente	ausente	0
Clostridio	<10	<10	0

## CONCLUSION

It might be argued that the two honeys are in accordance with existing laws in this country, and covers the honey of PET performed better physical, chemical and microbiological, indicating greater efficiency of this tile in relation to the fibroamianto.

## REFERENCES

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