The Hebrew University of Jerusalem	האוניברסיטה העברית בירושלים
Robert H. Smith Faculty of	הפקולטה לחקלאות, מזון
Agriculture, Food and Environment	וסביבה עיי רוברט ה. סמית
Department of Animal Sciences	המחלקה למדעי בעלי חיים
Rehovot, 76100 Israel	רחובות, 76100 ישראל
Tel: 972-8-9489395	08-9489395: טל
Fax: 972-8-9489871	פקס :08-9489871



Email: rully.r@huji.mail.ac.il

Mr. Z. Medlinsky CEO

Green Life Group

Ashdod Israel

Dear Mr. Medlinsky,

Enclose please find a summary of experiment conducted with your product at the Robert H. Smith, Faculty of Agriculture, Food and Environment Rehovot.

The objective of the study was to examine the safety use of Green Up C <sup>®</sup> detergent and disinfectant agent on blood and eggs residuals of Boron (key agent in Green Up C <sup>®</sup>).

Animals: the animal care committee of the Hebrew University of Jerusalem (NIH approval number OPRR A01-5011) approved all experimental procedures. (Appendix 1).

Three hens (Lohman LSL extra) at 40 weeks of age purchased from commercial poultry house and housed in the Faculty of Agriculture poultry house in individual cages. All rearing procedures conducted according to primary breeder's recommendations.

Treatments: Birds were sprayed with 5% Green Up C ®, blood samples and eggs were daily collected one day prior treatment (day 0) and then collected at day 1, 5 and 10. Blood samples and eggs were sent for analysis at certified chemical laboratory at the Hebrew University of Jerusalem, Faculty of Agriculture, Food and Environment (Z.B.M. - the analytical laboratory operated by Dr. Vasiliy V. Rosen).

**Results:** All results presented in appendix 1. In brief, Boron was not detected in blood and eggs after treatment with Green Up C <sup>®</sup> directly spared on the chickens.

**Conclusion:** According to the results presented we conclude that Green Up C ®, is safe to use on laying hens during egg production period, since no residuals were found in the blood and in eggs of treated birds. Eggs produced by laying hens treated with Green Up C ® are safe for human consumption.

Prof. Israel Rozenboim



## Appendix 1: Laboratory results



## האוניברסיטה העברית בירושלים

THE HEBREWUNIVERSITY OF JERUSALEM הפקולטה לחקלאות, מזון וסביבה Faculty of Agriculture, Food and Environment Z.B.M. - The Analytical Laboratory צ.ב.מ. - המעבדה האנליטית Vasiliy V. Rosen, Ph.D.



20-12782

Tuesday, December 22, 2020

Natalie Avital-Cohen, PhD

Department of Animal Sciences Tel: 972-8-9489397

Fax: 972-8-9489527 Cell: 972-52-8525061

Natalie.avital@mail.huji.ac.il

# Acid digestion (Hot-Block and Microwave-assisted) and ICP-MS analysis of Boron (B) concentration in blood and egg samples

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Sample	mg B/kg blood
0-1	0.247
0-2	0.291
0-3	0.450
1+1	0.322
1+2	0.206
1+3	0.083
5+1	0.483
5+2	0.352
5+3	0.526
10+1	0.050
10+2	0.077
10+3	0.008

Eggs

Sample	mg B/kg fresh egg
0-1	0.016
0-2	0.059
0-3	0.060
1+1	0.027
1+2	0.055
1+3	0.047
5+1	0.026
5+2	0.018
5+3	0.007
10+1	0.008
10+2	< 0.01
10+3	0.039

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The Interdepartmental Equipment Facility (ZBM Analytical Lab), The Faculty of Agricultural, Food and Environmental Quality Sciences, The Hebrew University of Jerusalem.

Dr. Vasiliy V. Rosen, P.O. Box 12, Rehovot 76100, Israel.Tel +972-8-9489975,
Cellular: +972-548820558, Fax +972-8-9489243. Email: <a href="mailto:icpaes@gmail.com">icpaes@gmail.com</a> vasiliyr@savion.huji.ac.il



# האוניברסיטה העברית בירושלים

THE HEBREWUNIVERSITY OF JERUSALEM הפקולטה לחקלאות, מזון וסביבה
Faculty of Agriculture, Food and Environment

Z.B.M. - The Analytical Laboratory
צ.ב.מ. - המעבדה האנליטית

Vasiliy V. Rosen, Ph.D.



QC: CRM 1547 Peach leaves was digested with HNO<sub>3</sub> using microwave-assisted digestion and analyzed on ICP-MS. The concentration of B found  $27.13\pm1.2$  mg/kg . The certified value is  $28.73\pm0.81$  mg/kg.

## Sample preparation

**Blood samples digestion.** About 1 g of blood was mixed with 4 mL of HNO<sub>3</sub> 35% and 1 mL of  $H_2O_2$  30%, then heated on the Hot-Block set up on 100 C during several hours. The samples were filtered 0.45 um (Millex filter) prior to ICP-OES analysis.

**Egg samples digestion.** Whole egg was homogenized by vortex and side-by-side shaker (1 h), then approx. 2.5 g of fresh material was digested with 5 mL of HNO<sub>3</sub> 35% and 1 mL of H<sub>2</sub>O<sub>2</sub> 30% using microwave-assisted digestion. The samples were dissolved completely.

בברכה

ד"ר וסילי רוזן