



BION, INŠTITUT ZA BIOELEKTROMAGNETIKO IN NOVO BIOLOGIJO, d.o.o.
BION, INSTITUTE FOR BIOELECTROMAGNETICS AND NEW BIOLOGY, Ltd.

Stegne 21, SI1000 Ljubljana, Slovenia
t: +386 (0)1 513 11 46 f: +386 (0)1 513 11 47
e: info@bion.si i: www.bion.si

RESULTS AND CONCLUSIONS OF PRODUCT TESTING »BIOPROTECTOR HARMONISING HEALTH«

Research subscriber :
DNM EXPORT IMPORT d.o.o
Kastelčeva 5, 8000 Novo mesto

Research contractor:
Inštitut Bion, d.o.o.
Stegne 21, Ljubljana, Slovenija

07.07.2010

SUBJECT, OBJECTIVES AND METHODS OF RESEARCH

The primary purpose of the research was to carry out scientific statistical tests in order to determine the biophysical and biological effects of the product "BIOPROTECTOR harmonizing health" or, in short, the Bioprotector.

The following tests were performed:

- electrophotography,
- biological sensor system,
- Emadel method for measuring changes in the human biofield
- tests with sensitive volunteers.

With this research we wish to determine whether the product "Bioprotector harmonizing health" has biological effects and a direct impact on the changes of the water's properties.

RESULTS

DIGITAL ELECTROPHOTOGRAPHY

The digital EP is a scientifically established method developed at the Bion Institute. The details are provided in the research papers and articles (eg. Berden, Jerman, Scissors: Electro and Magnetobiology Vol.16 / 3, 1997).

Bion developed a special system just for electrophotography, in order to capture the corona surrounding the water drops between periodic discharges. The essence of the method is the notion that subtle electromagnetic fields create a certain impression in the water, leaving an » imprint « on a drop of water, which then discharges a different pattern of corona. So before capturing the images, we place glasses of water on the testing place of the product and inform the water with an appropriate method. We used identical water, just not exposed to the research influence, for control.

Once captured, the images are forwarded to a computer for processing and analysis with standard and special (developed specifically for this purpose) software. The features of corona discharge patterns are expressed through a suitable set of parameters, which are obtained and compared in the computer analysis. These parameters provide the most important angular, radial and overall characteristics of each image. The differences between treated and control water are then qualitatively and quantitatively evaluated. The significance of the results is statistically tested.

When testing with digital electrophotography, we compared the water, which was exposed to the product "Bioprotector", with control water and distilled water (second control).

We captured 30 images of drops of water for each sample, totaling 90 images, which were then processed with the computer. Results were analyzed and appropriately evaluated.

Image processing shows various brightness and structural parameters. The brightness parameters mostly show the tested water's energetic aspect of the biofield. The structural parameters, however, show the fundamental characteristics of its information content. The differences between single parameters were appropriately, statistically processed.

The graphs below show the difference between the waters. Graphs 1 and 2 show the difference in brightness, while graphs 3 and 4 show the structural parameters.

Graphs 1 and 3 show the difference between the results (higher / lower value of parameter) within various parameters of the compared water. Graphs 2 and 4 show standard differences (with standard error) in the compared water, within various parameters. The outcomes are marked with red dots where the difference is positive (the value of a parameter in the first water of a pair is greater than in the second) and with blue dots where the difference is negative (the value of a parameter in the first water of a pair is less than in the second). The approximated point, where an individual difference becomes significant, is marked with (1.5).

A bigger difference within each parameter can be seen as a greater distance between the blue and red line, which signifies a bigger difference between individual samples, where sample represents individual line (see legend). If the red line is closer to the periphery, it means that, in average, there is a higher value of the corresponding parameter in this pattern and the other way around.

Graph 1 shows the difference in lighting parameters captured in the images of water drops.

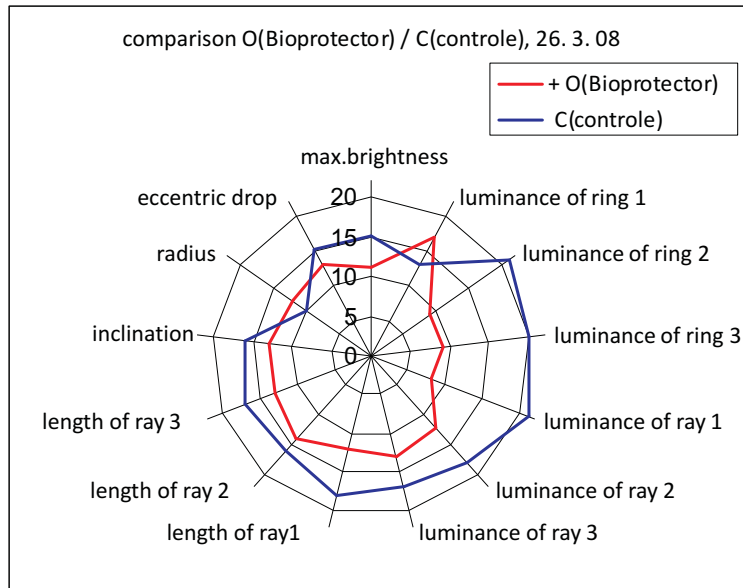
Compared to the control line, the Bioprotector shows less brightness of the ring, less brightness of the ray and a shorter ray. These differences are also statistically characteristic as shown in graph 2.

The differences in structural parameters can also be seen as demonstrated in graphs 3 and 4. The Bioprotector shows less contrast of rays 1, 2, 3 (these figures refer to 3 different criteria determining the beam), greater width of ray 2, higher homogeneity of rays 1, 2, 3, higher ray split that declines towards 3, lower standard deviation of length, greater width of sheaf 1, 2, 3 and greater width of ray 2.

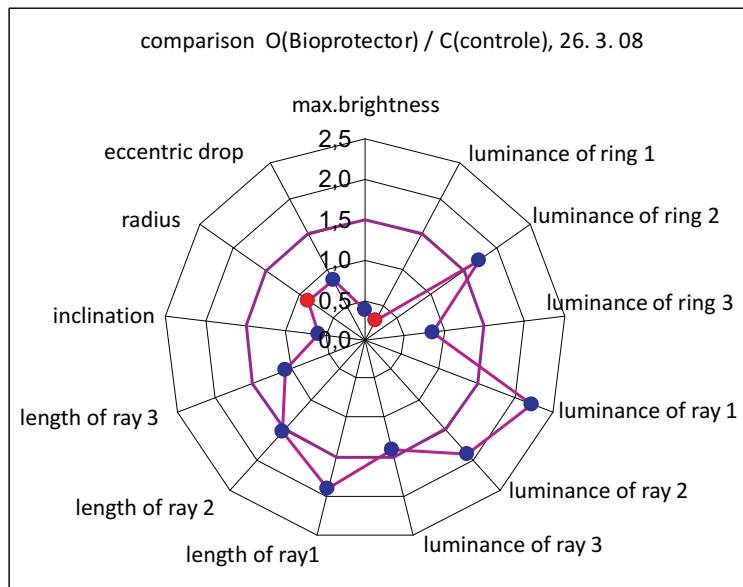
In graph 4 we can see statistically significant differences showing a lower contrast of ray and width of ray 1, lower standard deviation of length, greater width of sheaf and greater common width of ray.

Graphs 1 to 4: Graphs 1 and 3 show the difference between the results (higher / lower value of parameter) within different parameters of the compared water. Graphs 2 and 4 show standard differences (with standard error) of the compared water within different parameters.

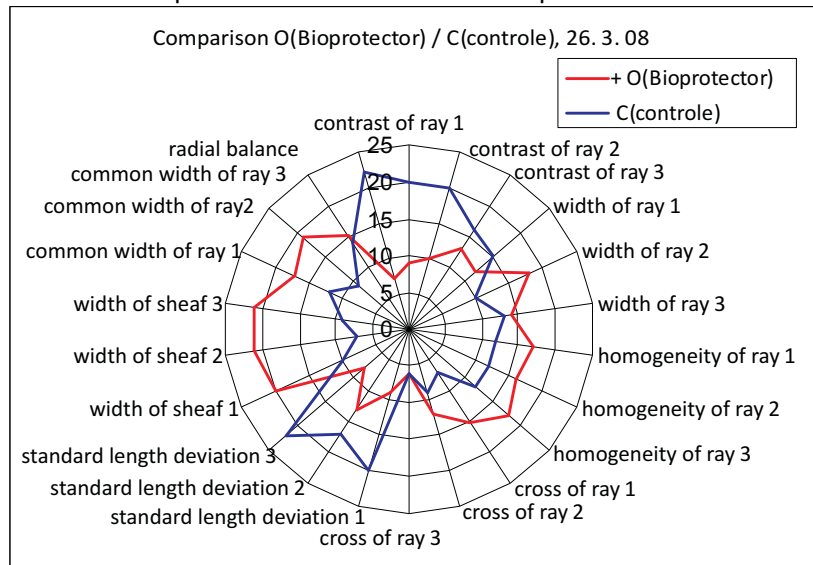
Graph 1 – differences in lighting parameters



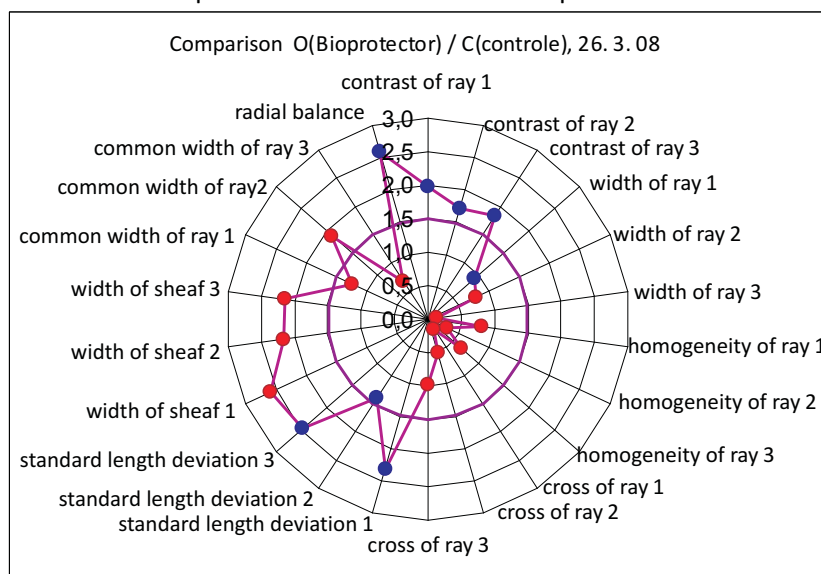
Graph 2 – differences in lighting parameters



Graph 3 - differences in structural parameters



Graph 4- differences in structural parameters



MEASURING THE IMPACT ON HUMAN BIOFILED WITH EMEDEL METHOD

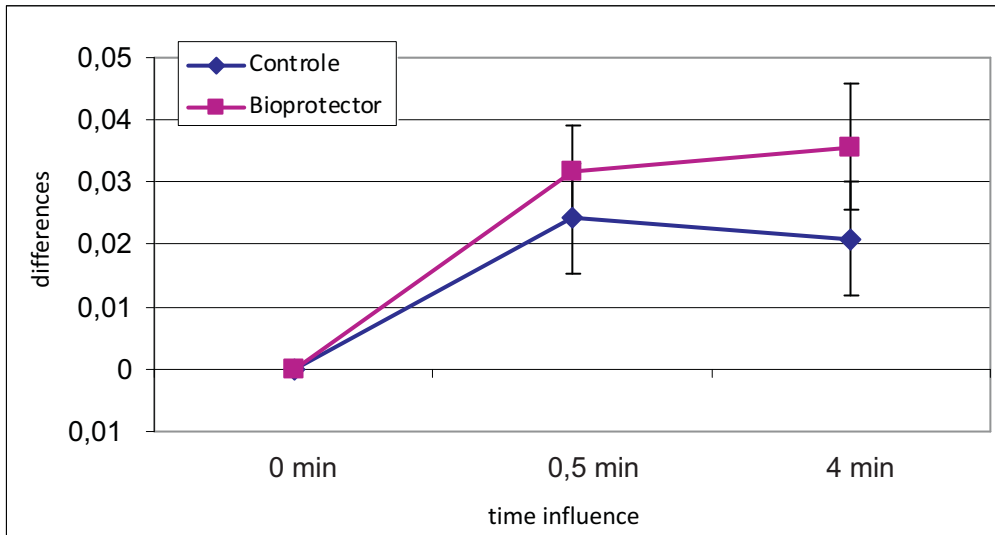
We performed this testing of Bioprotector as follows:

We laid a small box with the Bioprotector plate and the empty control box, in random sequence, under the chair of a measuring device, so that the persons taking part in this test did not know which is which. We properly cleaned the space between two patterns.

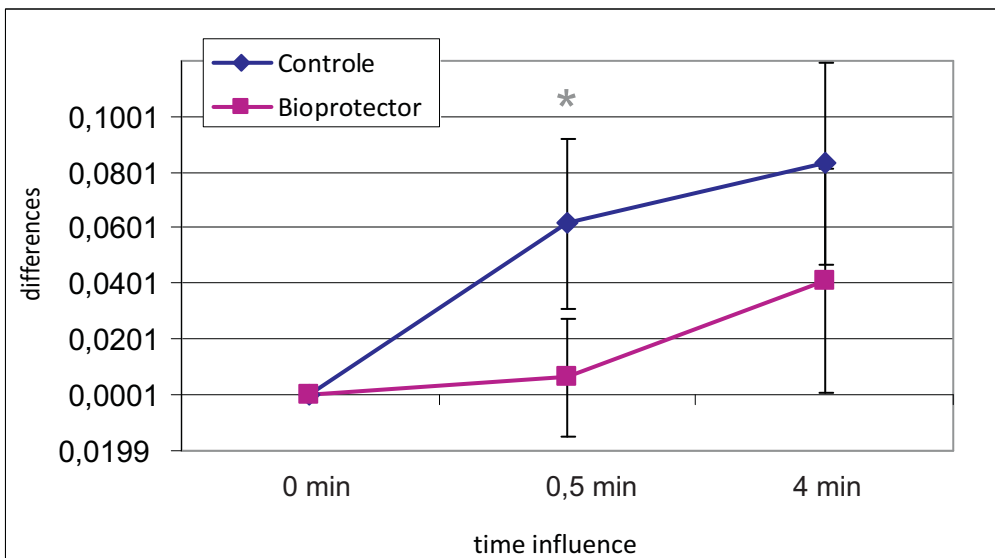
We measured the initial state of the persons with the Emedel Method. Than we measured the state of the person with the control box and then with the box containing the Bioprotector disc. We compared these measurements and calculated statistical parameters.

It was shown that, in general, compared to the control test, the signal (in standard values) was slightly higher after using the Bioprotector and had risen slightly in the contact measurements (as shown in graphs 5a and 5b). The measured results of the first of the direct contact sensors (K3, graph 5a) show that there is a difference between various time measurements (time of exposure of the product), but only weakly significant i.e. close to ($p \leq 0.1$). Only when we take the values of both measurements together (time of exposure after 0.5 and 4 min), the signal with the plate is higher than in controls. On second of the sensors (K4, graph 5b) the difference in the results after 0.5 min is near significant ($p \leq 0.15$) and, if we take the values of both time measurements together (after 0.5 and 4 min; $p \leq 0.12$), the signal is lower than in controls.

Graph 5a. Contact measurement of the body's biofield on the sensor K3. The average change in the signal in the presence of the Bioprotector. The vertical black lines represent the standard error variability of the results of measurements relative to the differences between individual persons tested. The differences between individual persons tested are not statistically significant.



Graph 5b. Contact measurement of the body's biofield on the sensor K4. The average change in the signal with the presence of the Bioprotector. The vertical black lines represent the standard error variability of the results of measurements relative to the differences in individual persons. The stars indicate a weak statistical significance of the difference between two points at 0.5 minutes ($p \leq 0.2$).

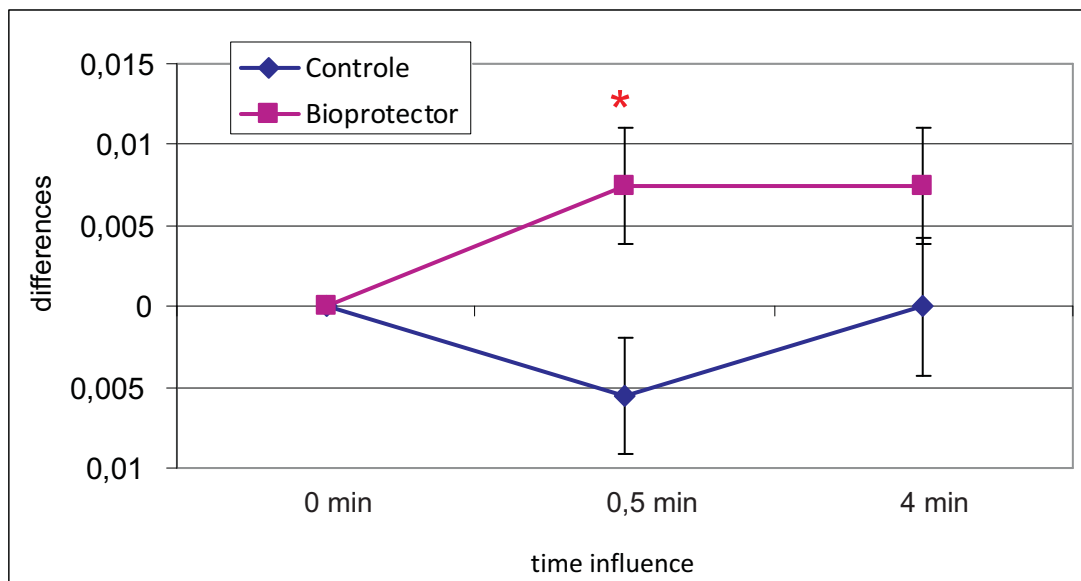


The measurements of the nearby field (graph 6) during the 0.5 min of exposure show different results for the product and the control. The difference is statistically significant ($p \leq 0.2$). When combining both measurements together (at the time of exposure after 0.5 min and 4 min) the difference is near significance ($p \leq 0.12$). By the end of the measurement without the presence of the Bioprotector plate, the signal rises again (it behaves as it would have without the presence of the plate). The results have a weak statistical significance; the effects of the Bioprotector on the nearby field can therefore be determined with caution.

The results indicate that the product has more of a protective effect, but it does not significantly affect the activity of a human biofield.

Volunteers, who have been measured using this method, were also asked whether they feel the changes in the presence or absence of the product. Most of them did not feel the presence, correct answers were 19%. Points, obtained in this psychological test, are considered as the bonus.

Graph 6. The nearby field measured close to the body. It shows the average change in the signal according to the presence (absence) of the product. The vertical black lines represent the standard error (variability in the results of measurements of differences in individual persons). The star represents statistical significance in the difference between the two results in 0.5 min ($p \leq 0.05$).



BIOLOGICAL SENSOR SYSTEM

For this test we prepared the water the same as for the test with electro-photography and compared it to the unexposed control water (the box without Bioprotector). The two boxes were over 7 m apart. Using this water we planted seeds in a cress garden. The next day we exposed them to heat stress and, after two days, we measured the length of cotyledons.

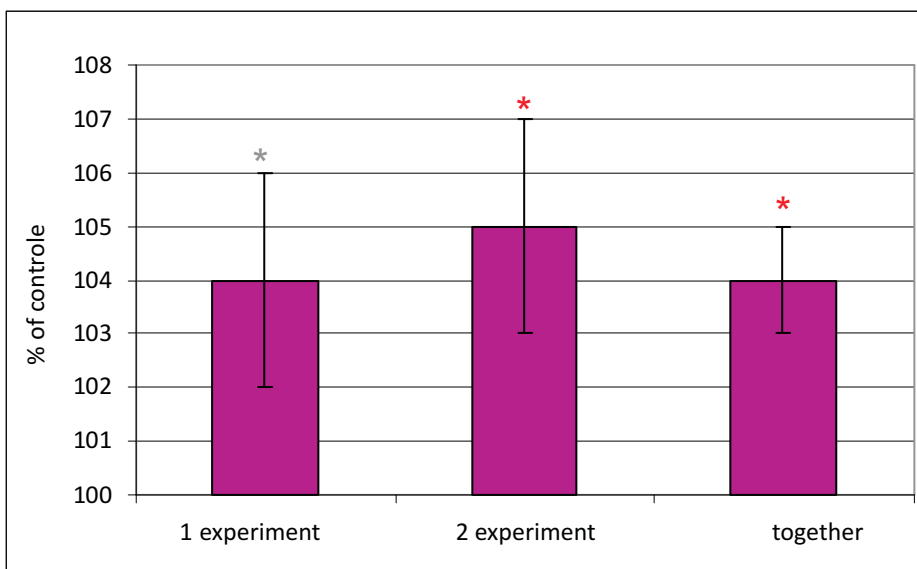
Results were statistically processed. The method is scientifically verified, the details were published in the research papers and articles (Ruzic, Jerman: Electromagnetic Biology and Medicine 21 (1), 2002).

Research shows that water exposed to Bioprotector significantly affects the response of biological sensor system, to approximately 4% in terms of significant heat stress, compared to the unexposed control water. In the first experiment the result is not statistically significant, although it is close ($p \leq 0.2$). The results are significant in the second iteration of experiment ($p \leq 0.03$) and when both results are combined ($p \leq 0.02$). The results are presented in chart 1 and graph 7.

Chart 1: The effect of water exposed to Bioprotector on the growth of biological sensor system - a standard test with heat stress (% K - the difference from control, where the control value is 100%; AV - the average length of cotyledons, SD - standard deviation, N - number of sprouted and measured cotyledons, p - statistical significance (the difference is statistically significant, if the p value is equal or under 0.05)).

		AV	%K	SD	N	p
1 experiment	B	20.8	104	4.6	177	0,18
	K	20.0		5.6	183	
2 experiment	B	20.8	105	4.5	186	0,03
	K	19.8		4.3	181	
together	B	20.8	104	4.6	363	0,02
	K	19.9		5.0	364	

Graph 7. The growth of cotyledons, depending on the type of water, with which they were poured. The vertical black lines are representing the standard error (variability in the results of measurements of cotyledons). The star represents the statistical significance in the difference between the average lengths of cotyledons treated with Bioprotector and control (gray: p = 0.2; one red: p = 0.05).



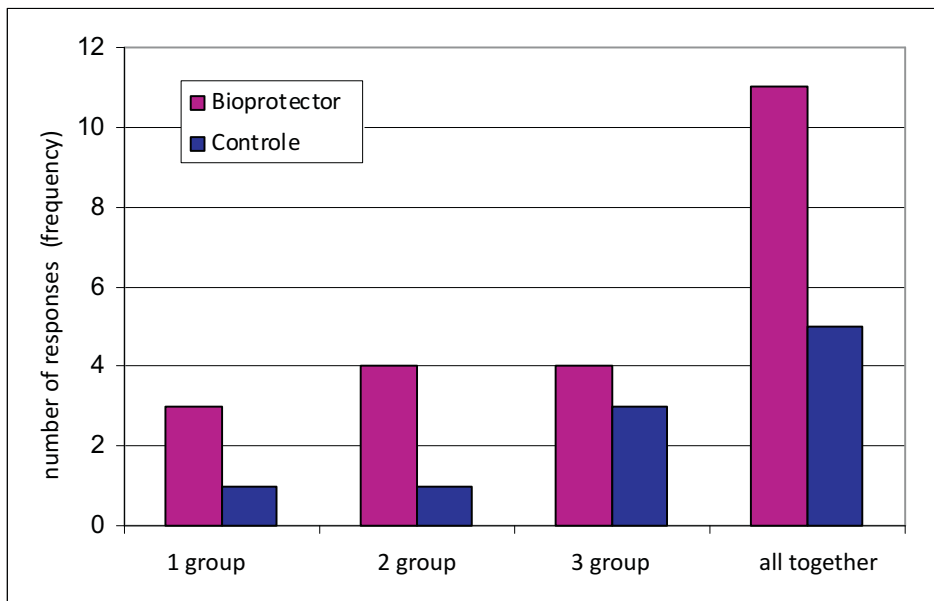
TESTS WITH VOLUNTEERS

Three groups of selected volunteers sensitive to subtle radiation (a total of 25 people) were used to test a box with Bioprotector and, as control, the same box without the Bioprotector, making sure that the boxes are at least 7 m apart. Both boxes were wrapped and marked with codes, so that neither the volunteers nor the testing coordinator knew which is which (double-blind test). The feelings were detected with hands under a special protocol.

Then the volunteers filled the prepared and established questionnaire. The first question was intended to determine whether the volunteers feel the difference between the boxes and their rough impression. The analysis of the responses to the first question has shown that volunteers distinguish the differences between two samples with a weak statistical significance. Afterwards we applied the H_i^2 test ($p \leq 0.13$), where volunteers detect positive energy (vibration, gives energy, vitalize and / or gives energy) from the Bioprotector plate. The responses in the groups of volunteers with different levels of experience are shown in graph 8.

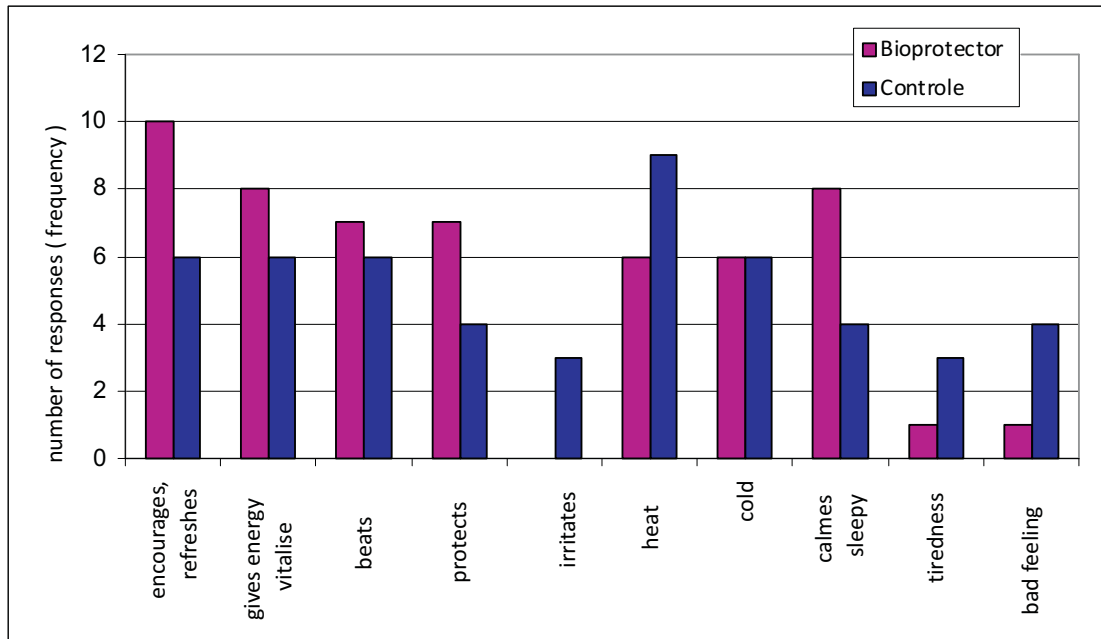
The analysis of the results by groups has also shown that the most experienced second group, perceived the positive effects of plates well, with significance $p \leq 0.09$. Other two groups only perceived a trend. Furthermore there were also 20% of individuals who perceived a difference, but could not describe it.

Graf 8. The number of volunteers that have selected the perception as: vibration, gives energy, vitalizes and / or gives the energy (i.e. frequency of responses to the first question).



The detailed analysis of responses to the second question, where we wanted volunteers to describe more accurately the feelings they had with each sample showed the following; after the grouping of similar feelings such as calm, sleepy, tiredness, bad feeling, we found that these are not random answers, as shown with a weak significance after the H_i^2 test ($p \leq 0.13$), and that there is a difference in frequency of responses between the Bioprotector and the control for emotions like "gives energy, vitalizes and beats", which shows weak significance by Student t-test ($p \leq 0.12$). The difference in the number of responses between the two samples is shown on the graph 9.

Graf 9. Responses of volunteers to the second question.



INTERPRETATION AND CONCLUSION

The results have shown that the tested product Bioprotector creates its own biofield. The Bioprotector reduces the coherence of the negative impact of the surroundings. It also reduces the intensity of radiated energy and calms the space. In that way it protects human biofield against subtle energetic effects of the environment. The Bioprotector itself is energetically neutral.

Testing with method EMADDEL has mainly shown a rise of the signal in contact sensors and in measurements of the nearby fields. The results show weak statistical significance. The Bioprotector didn't affect the activity of the Biofield.

On the biological sensor "Bioprotector harmonising health" had a statistically significant effect of 4%. Tests with volunteers have shown that sensitive people detect positive energetic influence of the product "Bioprotector harmonising health "(responses such as refreshes, vitalizes and /or gives energy, calms).

The results are more significant with experienced people. These responses along with those from Emadel show that the Bioprotector protects people from the stressful subtle effects of environment to a certain extent, resulting in more energy, but also in greater calmness.

In conclusion, the product "Bioprotector harmonising health "affects the surrounding space by affecting the biofield protectively and not by interfering with its active development.

The effects of the Bioprotector on people are therefore to help relieve stress by preserving more of their own energy (biofield) and by calming. Highly significant effect on the biological sensor confirms this statement.

SCORING for CERTIFICATE

The tested product "BIOPROTECTOR HARMONISING HEALTH" has reached the following number of points according to the method of testing:

number of score	nu. of possible sc.
electrophotography test	
10	15
EMADEL test	
6	10
biological sensor test- bonus points	
4	+4
test with volunteers	
3	5
total points	
23	30
made %	possible %
77%	100%

According to the following criteria, the result obtained (77% of possible points) fit the required criteria for granting a certificate of class II.

Criteria:

The certificate of class I	is awarded to tested product at 90% of possible points.
The certificate of class II	obtains the tested product that reaches 75% of possible points.
the certificate of class III	obtains the tested product that reaches 60% of possible points.

The product »BIOPROTECTOR HARMONISING HEALTH« receives the
CERTIFICATE FOR PROTECTION AGAINST UNWANTED EFFECTS OF UNIONIZED
ENVIRONMENTAL RADIATION of class II.

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