ENERGY REGENERATOR

IT HAS ALREADY HELPED 2 MILLION PEOPLE

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Compiled by Ryszard Olszak based on PIMAT research

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Contents

I. INTRODUCTION

PIMAT is a fabric product of 18cm x 18cm in measurements with dots printed in particular spots of it. According to the inventor of PIMAT, the action of this product is based on the energetic effect of its geometrical configuration (EEKG - a Polish abbreviation for it as introduced by Professor J. Mazurczak; or neoenergy - a term proposed by Dr. S.V. King). EEKG, or neoenergy, means the action of a shape (geometrical configuration) on matter.
In order to characterize and determine neoenergy, radiesthetic colours are used. Radiesthetic colour is a conventional notion meaning that a specific colour corresponds to a specific wave length.
PIMAT is described as a 'regenerator of vital forces (or stamina)' because it generates an entire spectrum of radiesthetic colours essential for the body to maintain a healthy condition.

It is a practical implementation of the words of priest professor Włodzimierz Sedlak (among others "Bioelectronics", "Introduction to bioelectronics", "Improvements of the physics of life")
"Each organism is an emitter of electromagnetic fields of various wave lengths and it's receiver, detector(...). From the position of electronics it seems a valid assumption, that biological reception of magnetic fields should be done through the same factors, that emit, as a vibrating setup receives a wave of the same frequency, that it generates.(...)The nature of plasma is such, that both life, and it's evolution would have to end relatively fast, if not the energetic powering from outside (...). One has to take under consideration not only the eliminating selection, but also favoring a certain energy scale in information's reception. Some wavelengths are incredibly needed. The biological system "catches" a certain length as the most useful for itself."

From the point of view of radiesthetic chromotherapy, fatigue or disease, is a 'disturbance' of the radiesthetic colour in a given organism.
It has been found out that PIMAT is helpful in the following conditions (enumerated below in order of frequency of occurance):
sleeplesness or fatigue
lumbago and headaches
rheumatic pains
migraine
neuralgia of the nerve roots
upper respiratory tract infections and sinusitis
sexual problems.

It should be noted that PIMAT affects the human organism, irrespective of an individual's age, on two levels:
physical - it energizes the organism
mental - it regulates the nervous system.
Depending on the needs, PIMAT acts either as a stimulant or sedative. Therefore, the most common sensations experienced by PIMAT users are a better frame of mind, an influx of energy and an increased enthusiasm for work and life in general.
The effect that PIMAT has may be noticed as early as the first day of its application. In particularly sensitive persons a strong warming in the sacrum area may be felt and a significantly reduced need for sleep experienced (this could explain why some of the subjects responded negatively to PIMAT). However, these reactions generally subside after two or three days , and a phase of self-regulation and self-cure of the body follows. In some cases - sinusitis, for example - positive effects can be observed as late as 10-14 days, or even longer, after PIMAT was applied.
It should be stressed that PIMAT is not harmful to the human body. This has been proved by scientific research and radiesthetic expertise - the respective descriptions and opinions are presented in the chapters to follow.
PIMAT is very easy to use. Users should apply it printed side up in their beds - under the sheets or mattresses not thicker than 25 cm - at the height of the sacrum. Irrespective of the body position, the user is subject to the therapeutic action of PIMAT.
PIMAT never loses its therapeutic strength until it is physically damaged.
PIMAT as the only object belonging to the natural means supporting the human organism in self-regulation and self-healing that has been that thoroughly tested. Incredible effects of this research are the matter of this compilation, ("PIMAT the Life Force Regenerator") which is popularized only in the free of charge version. There are 11 experiments described here [among other clinical tests and users' opinions, experiments on fish, crayfish and frogs, tests on rabbits, on bacteria and yeast, algae testing, the certificate of conformity of Polish Psychotronic Association and Kirlian photographs of PIMAT research). (I possess a complete documentation for people interested in conducting research or implementing them for commercial purposes) _____

II. THE EFFECT OF PIMAT ON THE RECOVERYPROCESS OF PATIENTS HOSPITALIZED AT THE SURGICAL WARD - Health Service Group in Gryfin Surgery Ward

1. An Evaluation of the Effect of PIMAT on the Process of Treatment of Patients Hospitalized at the Surgical Ward

1.1 Research objectives

The project was to establish the effect of PIMAT on the response to pain, on sleep and the mental condition of patients hospitalized at the surgical ward under discussion. Their condition was determined on the basis of daily observations made by a physician and the patients themselves.

1.2 Research method

The subjects in the experiment were fifty patients at the surgical ward. Data were collected daily and recorded on charts. In the morning, at the temperature taking time, the patients determined their condition by answering the questions: How did the day go? How was the night? Simultaneously, the physician analyzed the amount of analgesics, hypnotics or sedatives administered to a patient over the 24 hour period.

Three groups of patients were selected for the project:

Group I - patients with compound fracture of the thigh and shank bones, treated for a long time in skeletal traction. This group included 20 patients, 15 of whom were over 75 years old.

Group II - 15 patients who suffered from various gallbladder, biliary tract and pancreas related conditions. They all were in bad condition and complained of acute pains. Six of them had itching of the skin caused by jaundice.

Group III - 15 patients suffering from diseases causing severe pains: stomach cancer duct, colorectal or mammary carcinoma at various stages of advancement. Some of the patients were in very serious condition - metastases had invaded bones, lungs and brain. In this group of patients were also five persons suffering from spastic colons and recurring colon abscesses.

Results:

All the observations, remarks and interviews were recorded on specialist examination charts (the originals of the charts are filed together with the remaining set of original research documentation on PIMAT, and are available to everyone interested). Having completed a series of examinations of the aforementioned 50 subjects, the results obtained from the three experimental groups were analyzed and compared.

Group I - a certain regularity was noticed: with PIMATs applied, pain in the fractured limbs considerably decreased, sleep was better, and the patients calmer, some of them even feeling well, after two or three days at the latest. The patients asked neither for sleeping pills nor for pain killers.

Group II - in spite of the pain suffered by the patients under the present investigation, which condition required administration of analgesics, the patients became calmer and slept better as soon as five days after PIMATs were applied. It should be noted that the itching of the skin in the jaundiced patients began to subside.

Group III (most seriously sick) - the patients were eventually administered little or no analgesics as they simply did not demand them. Moreover, their sleep was more regular, their general well being improved and so did their faith in the improvement of their condition.

It is also worth noting that a certain regularity was observed in the improvement in the condition of the patients suffering from spastic colon and mild forms of colon abscesses — their stools were regular and they stopped complaining of flatulence and pain.

Conclusions:

The results obtained from the examination of a large group of patients exposed to the PIMAT regenerator of vital forces have led the experimenters to the following conclusion: PIMAT is not a replacement for pharmacologic treatment, but it is an auxiliary element which significantly reduces the quantity of analgesic, hypnotic and sedative medications administered to patients.

Head Surgical Ward
Ryszard Kaczmarek
Surgeon
Health Protection Organization Expert

III. THE RESULTS OF RESEARCH CONDUCTED IN MILITARY MEDICAL ACADEMY IN SANKT PETERSBURG

Signed by: the Governor of the Department of Electrophysiology of the Central Nervous System of the Military Medical Academy, Candidate of Medical Sciences of Aleksandrow

1. The subject of research.

The product is a prefabricated rectangle made of linen cloth with dimensions of 18x18 cm. On the upper side of the product there are 10 red circles and a PIMAT sign.

1.1. The goal of research.

According to recommendations of the manufacturer of the subject of research, the goal is to evaluate effectiveness of the product PIMAT in it's clinical use for people with pains of peripheral nervous system and nervous upsets.

1.2. Materials and research method.

The research has been conducted in 103 persons (80 men, 23 women) aged 28-56. 42 of the subjects with waist-sacral pain syndrome in the exacerbation phase, 61 people with neurasthenia with a sleep disorder. PIMAT according to the manual has been placed under the sheet of the examined people in the area of loins for 7 days. The neurological state of all the examined people has been evaluated during and at the end of the research, EEG has been registered, a self-evaluation of general affection according to questionnaires (SAN, active phobias). The statistical relevance of the results has been evaluated by the T-Student test.

1.3. The results.

There have been no cases of bad reactions to PIMAT's actions during the clinical research. Some people have noticed "the feeling of warmth", "a pleasant compression", in the place of implementation. For people with the symptoms of the waist-sacral syndrome usually on the 4th, 5th day of using a decrease in pain's intensity in the waist area has been noticed. Objectively a decrease in plasticity in the area of waist has been observed, practically no symptoms have been present.

In the group of the examined with neurasthenia on the 2^{nd} ,3^{rd} day sleep has normalized and has been adequate to it's depth and lasting time, on waking up there has been a felling of complete rest.

Characterizing the general affection of the examined according to questionnaire methods it has to be emphasized that at the beginning the general affection in the whole group could be characterized as: pretty low level of general affection, activity and mood at high results of reactive phobia. (see the table).

The indicators of questionnaire methods logically reflect the expressed neurotization of examined people. After the therapy with PIMAT statistically relevant (to $p < 0,05$) increase in the indicators of general affection and mood according to the SAN method has been observed. Relevant changes in the activity indicator have not been noticed. The level of reactive phobia after implementation of PIMAT has been statistically lower than in the beginning.

Table 1/III

The impact of PIMAT on general affection indicators

Factors	Beginning state	After using PIMAT
General affection	52	67*
Activity	55	59
Mood	50	65*
Reactive phobia	45	32*

* - statistically relevant parameter change.

During the analysis of an EEG recording after comparing it with the beginning state, the occurrence of fast-wave component of beta-diapason waves has decreased. Using PIMAT hasn't caused any pathological changes in the spectral recording of EEG.

1.4. Summary.

The results achieved with clinical tests allow to think, that PIMAT show therapeutic effects with the waist-sacral syndrome, decreases the pain syndrome, normalizes sleeping with neurotic disorders. Using PIMAT causes no harmful effects.

IV. DESCRIPTION OF SOME CASES OF THERAPEUTIC ACTION OF PIMAT

1. We present several opinions of PIMAT users, chosen from the feedback we receive

1. PIMAT has changed my life after 2 months of using it. My problem was connected with arterial hypotension, which complicated my personal and professional life. Everything has changed since I began using PIMAT. I wake up in the morning alone after 7,5 - 8 hours of sleep, rested and with great general affection. I control my arterial tension, which is on average 130/80, and before it has never exceeded 115/65. My friend, who slept very alertly and often suffered from insomnia, since the day she has used PIMAT she sleeps perfectly and as a great general affection.

2. So small, but so effective. I have been sleeping on it for 3 weeks now, but I already feel a great relief. I suffer from rheumatoid arthritis, and I couldn't sleep because of the pain. Now I sleep well, I can slightly bow my knees with no pain. Also my husband, who suffers from spine degeneration, has felt serious relief.

3. Spinal cord's pain have ceased and my sinuses have been cured

4. I would like to thank you very much for PIMAT – its effects on my health are outstanding. I feel like I regained my old inner energy, I don't know what headache is anymore and I very easily deal with any viral infections. Before, I had been suffering from lumbago for 5 months, and then from sciatica; after 2 weeks from receiving PIMAT, the pain became milder and started to gradually disappear. After 3 months, the pain was gone.

5. It is a wonderful discovery, works like bio-currents.

6. My neighbor gave me PIMAT, within three days my spinal cord's pain has completely vanished.

7. I would like to thank for such a the wonderful invention as PIMAT. By complaints such as: bone pains, headaches and general tiredness ceased in the morning after getting up from my bed. A seven year old child wet himself in the night, currently the complaints have stopped. He sleeps well.

8. The result is incredible - I have had sick legs for over three years, constant pain in my feet, knees, sleep disorders, spiking tension. Everything has ceased - above all the feet, knees, the pain has dissipated, sleep like of a young girl's. I get up stronger, more rested, my tension has also sort of dropped. God bless.

9. I would like to thank you for this effective invention, that I use for my Burger's disease. After about 4 months of using PIMAT inflammations of blood vessels have ceased.

10. I would like to thank you for such a great invention as PIMAT. My mother has had diabetes for 20 years and has completely lost sight. For a year, she has been suffering from arteritis and phlebitis, and the Burger's disease became so serious that nothing seemed to help. I put PIMAT to my mother's bed not telling her about that, because she does not believe in such treatment. And since I change her bandages, I could observe the results. After 6 weeks of using PIMAT, a left-foot toe, which used to be black as coal and the wound was 4-cm long and 2-cm wide healed perfectly and both arteritis and phlebitis abated. I also felt the effects – for 8 years I've had problems with my spine and legs; initially, the pain was stronger than before, but after 3 days it disappeared.

11. I have been sleeping according to tips on "PIMAT" for a month. My complaints connected with very low blood pressure and headaches have ceased. I feel much better. Medicines that I have used so far have produced almost no effects.

12. PIMAT has a positive influence on my mental state and my complexion. I feel like I had more vital spirit and energy. I have gone through four surgeries, chemotherapy and irradiation, and at the moment I can go for very long walks. My daughter is also amazed with the effects of PIMAT – for 3 months her periods have been completely painless.

13. I was always very weak (dizziness during changing weather and strong winds, high pressure, frequent headaches, neurosis, diseases of circulatory system). After using PIMAT for 2 weeks, I felt more energy in my body. In the beginning, the pains became stronger, but I stopped feeling dizzy. Now, I haven't had a headache for a few days and I am very happy.

14. I am an 80-year-old, sickly woman. I felt pain in my hip, and it stopped after two nights. My knees ached, and they don't ache now. I had problems with sleeping, and they are gone now. My finger was rotten for a year, and it healed in a week. A wonderful invention.

15. I turned out to be revolutionary. My child is rested, it gets tired less and is more resistant to sicknesses.

16. I am a retired miner and I had many complaints - spinal pains, radicles' inflammations and many more. Since I have begun using PIMAT (2 years) I am incredibly healthy.

17. After using it for 3 weeks the pains have ceased (they were very raging).

18. It is a really incredible way of repairing the health. After a few nights I feel like a newborn. Tiredness ceases, rheumatic pains are no longer, headaches dissipate, a man replenishes life force.

19. It has also helped my husband, and also my close ones and child. Our general affection has improved and headaches, feet pains and especially back pains have ceased.

20. I have been using PIMAT for 3 months. My blood pressure was high (170/110) but it has been regulated and now it is within the norm.

21. It has given me enough health, that I could walk to church without a stick. It has cleared my lungs, regulated my pressure, partly has caused the rheumatic pains in my knees to cease, the pains in my arms and hands have dissipated.

22. I have SM, I had trouble sleeping due to frequent reaction of my lower limbs. Now the frictions, their frequency have considerably decreased, back pains have also become less intensive. My headaches are gone.

23. After 3 weeks, I felt much better. The pains in my spine got milder, my low pressure (95/50) was regulated to (125/80), I am not sleepy all the time, I just know I want to live

24. I have been using it for a month and I feel very good. I used to feel pain in my liver and gall bladder, and they are almost entirely gone; I also stopped feeling rheumatic aches and I sleep well. My 7-year-old child used to wet its bed and now everything is fine. Thank you for this invention and I hope it helps thousands of people.

25. For the first time in many years I had a painless period, and my other complaints are no more.

26. We ordered PIMAT a month ago for our 14-year-old daughter constantly suffering from chronic viral infections, and – in consequence – from bronchial asthma and allergy. PIMAT had very positive effect on minimising these conditions. General weakness, nervous tiredness and insomnia are also over. What returned is complete balance, calmness and healthy sleep.

27. I have been using the regenerator for a month. My health has significantly improved. I am 55 years old. Since I was 20, i.e. for 35 years, I have been suffering from spine disease and pain. After three weeks of sleeping on PIMAT, I hardly ever take any medicine. I sleep very deeply. I am stronger than ever. Now I really want to live.

28. My daughter has been bitten in her leg by a wasp, which caused allergy. Drinking lime hasn't helped, constantly new blotches have been created, quite itching. I laid my daughter on PIMAT. After one night the blotches have disappeared, and the itching has gone.

29. Using PIMAT turns out to be helpful. After 2 weeks a significant improvement (rheumatic, circulation and other issues).

30. I am very glad as it has eased my pain.

31. It has cured my sick blister and now I can go to bed sleeping not urinating every few minutes. I do not see my sick legs anymore.

32. My husband has been cured from chronic wog, and me, although I have been sick all my life, feel much better now.

2. Report of PIMAT's therapeutic action recorded by Tadeusz Wiecki, M.D., who specializes in natural treatment methods.

A patient was suspected to have neurological changes, showed symptoms of depression and chorea, suffered from a total sleep disorder , had a pricking sensation in the entire body, as well as problems with thinking and coordination. The patient - a woman aged 40 - slept normally the very first night PIMAT was applied. The symptoms she suffered from were reduced to disappear after a few days.

● Female - aged 80. Arthritis. She suffered from pains and could not leave the bed. Resigned, the patient did not believe that anything could help her. Her daughter placed a PIMAT under her bedsheet without her knowledge. The following morning the woman got up by herself and did some walking during the day.

● Female - aged 35. Ischias with radiating pains. After one night's exposition to PIMAT her pains subsided. Although they returned during the day, they were completely gone after several days.

● Female - aged 63. Arthritis. Degenerative changes and pains. Although treated with acupuncture and homeopatic medicines, which help a great deal, she feels there has been a dramatic change for the better since she started using PIMAT.

● Female - aged 70. Coronary disease, circulatory insufficiency, arteriosclerosis (noticeable loss of energy, circulation and strength), difficulties with walking, middle ear infection, pains in the back and legs, blood pressure changes, impaired efficiency of the left kidney. Only after one night of being exposed to PIMAT, she felt better during the day, became more energetic, and her face changed its colour from paper-white to pinkish; she was also able to make a better use of her arms and legs. After a few days further improvement was noticeable – the ear infection disappeared and the hearing got better.

● Boy - aged 7. Hyperexcitability, sleeping disorder, bed wetting. With PIMAT, the boy sleeps soundly. Nightly bed wetting is now infreguent.

● Female - aged 55. Cholelithiasis, right-side pains, headaches, sleeping problems. With PIMAT she sleeps soundly and no pains occur.

● Female - aged 50. She suffered from headaches for 20 years. At the moment she started using PIMAT headaches stopped.

● Male - aged 50. Breast carcinoma with metastasis. Bone pains in the entire leg. With PIMAT the pains subside and he feels better.

● Male - addicted cigarette smoker (up to two packs a day) with very poor circulation in the legs, which made walking impossible (terrible pains). After a dozen days of using PIMAT the pains lessened. The man is now stronger and has regained his motivation to live.

● Female - aged 48. Inflammation related pains in the ovaries, menopause problems - considerable pressure and heat rushes in the head - headaches, sleeping difficulties. The patient was treated with homeopatic medicines, which helped, but her problems disappeared almost entirely shortly after she started using PIMAT.

3. Observations on the effectiveness of PIMAT

The present observation was made on children and teenagers treated in an outpatient clinic for chronic respiratory track conditions. Over a period of three months the patients under examination suffered from hayfever, asthma, allergic respiratory tract inflammation and obturating bronchitis.

GENERAL REMARKS

All the patients reacted favourably to PIMAT used in their treatment as a regenerating and supporting element. None of them claimed to have a negative reaction from their organisms.

Among the favourable effects reported by the patients were their overall better frame of mind, better and more restful sleep, better appetite and reduced symptoms of their conditions.

Out of the 100 patients under the present observation, 34 claimed to have no improvement in their condition in the first month. In the third month, however, only 20 patients said there was no change for the better.

As early as the first month of the experiment, 53 patients noticed improvement, of which 44 continued to feel better throughout the observation period.

SUBSIDENCE OF SYMPTOMS

was reported in the first month by 10 patients,
in the second month by 15 patients,
in the third month by 47 patients.

Considering the chronic character of the patients' conditions -difficult and slow to treat by standard procedures - it may be stated that PIMAT favourably supports treatment of patients.

B.Pustkowska
Paediatrician Lung Specialist
Poznan

V. EXPERT' S OPINION THE EFFECT OF PIMAT ON THE IMMUNITY OFRABBITS IMMUNIZED WITH INACTIVATED CHLAMYDIA ANTIGENS

Issued by the Microbiology Department of the Natural Sciences School, Szczecin University, Szczecin (Poland).
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As the Chlamydia Trachomatis and the Chlamydia Psittaci latent infections are on the rise in the human population, a study was carried out to investigate the effect of PIMAT on the immunity to these two antigens. The experimenters focused on selected indices of specific and nonspecific immunity tested on laboratory animals (rabbits). The study revealed that the immunity systems of the rabbits reacted positively to the afore mentioned antigens, the changes being statistically essential. Therefore, it may be assumed that people will react in a similar manner to these antigens.
PLEASE NOTE that the expert opinion to follow is based directly on the description of the experiment includeded in Chapter VIII of the present study. (Part I and Part II are overlooked –if you are interested in I can make it accessible)
The effect of PIMAT on the immunological reaction of rabbits immunized with the inactivated Chlamydia antigen.
The goal of the experiment was to define the changes in the dynamics of the hematologic and immunological indices (see a similar study - Part I) in the following groups of rabbits : (1) immunized with Chlamydia and 'placed' on a PIMAT, (2) immunized with Chlamydia and not exposed to PIMAT, (3) a control group, i.e. one that was neither immunized nor exposed to PIMAT. At this stage of the experiment clinical symptoms in animals were being monitored and recorded; moreover, the degree of infection was being observed (clinical and serologic tests), and the temperature and humidity of the environment in which the rabbits had been put were being recorded.
1. The animals
The animals were rabbits, same as described in Parts I and II, of the present work. They were kept in like cages, the only difference being that throughout the experiment they stayed in the vivariums of the District Hospital Complex in Gorz6w Wielkopolski and of the Microbiology Department, Szczecin University, Szczecin. The feeding, watering and general care were the same as described in Parts I and II.
At this stage of the experiment the rabbits were also healthy and did not show any deviations that would indicate a disease.
The PIMAT used was identical to the one described in Parts I and II.
2. The antigens and other substances administered to the animals
a) The antigen with which the animals were immunized was the Gocaltowo 5082 EP-4-EP7 Chlamydii Psittaci strain suspended in physiological saline. The strain had been inactivated with formaldehyde, in accordance with the Czechoslovak procedure (Travnicek 1991), and it contained 25 μ*q/ml* of corpuscular antigens.
3. The format and the description of the experiment
In this part of the experiment, tested were 30 rabbits, further divided into three groups (labelled I, II and III) - 10 subjects in each.
Group I included 10 rabbits hypodermically injected with 10.0 ml (5 ml x 2 , at seven day's intervals) of the Chlamydia antigen each . These rabbits were kept in cages with PIMATs (see Part I).
Group II were again 10 rabbits immunized with the Chlamydia antigen like the subjects in Group I, but placed in another room in cages with no PIMATs in them (see Part I).
Group III included 10 control rabbits kept in still another (third) room in cages with no PIMATs in them. The animals were hypodermically injected with a 0.9% saline solution (NaCl) in the exact amount and following the exact procedure as was the case in the administering of the Chlamydia antigen in the other two groups.
At this stage of the experiment the injections were given to the animals directly after blood samples from those animals (Groups I-III) were taken. Thus, two groups (I and II) were injected with the Chlamydia antigen and one group (III) was injected with saline solution. Next, all of them were put into specially prepared cages with PIMATs (Group I) or without PIMATs (Groups II and III).
4. The duration of the experiment
Because of such factors as (1) the characteristics of the parameters under the present study (see Part I), (2) the intracellular parasitism of Chlamydia after entering a living organism and (3) the assumption that serologic tests -i.e. observations of the changes in antichlamydia antibodies -are essential, blood samples were taken consecutively on the following days of the experiment: 1st, 7th, 14th, 21st, 28th, 35th, 42nd, 49th and 56th.
5. The testing methods
The clinical, hematologic, immunological and statistic tests, as well as the test to determine the bioclimate of the rooms where the rabbits were kept, were performed by the same methods as the ones described in Part I. In addition to the above listed tests, also serologic tests were carried out.
5.1 The serologoc tests
The antibodies for the Chlamydia Psittaci in the rabbits' serums were marked with the complement fixation test (CFT) for the Dessau Company (Germany) antigen, according to Instruction No. 46 of February 22, 1979 written by the Veterinary Medicine Institute in Pulawy (Poland) and issued by the Veterinary Medicine Department of Poland's Ministry of Agriculture. The tests were administered in solutions 1:2, 1:4, 1:8, 1:16, 1:32 and 1:64, and - in agreement with the above quoted instruction -the 1:16 and higher solutions with no hemolysis taking place /++++/ were considered positive results.
6. The results of the experiment
The results of the present experiment are given in tables 1-4/V. They reveal that the results of the hematologic, immunological and serologic tests performed on the rabbits in Group I are effects of the action of the Chlamydia and PIMAT; in Group II, they are the effects of the action of the Chlamydia. The clinical tests (see table 4/V) fully

confirm the thesis that the antigens used do not cause any pathologic changes in the animals under the present study (Groups I, II and III). Moreoever, the tests on the bioclimate - i. e. temperature and humidity - of the experimental rooms - fall within the nationwide standards for rabbits (as specified in: the Chart of the Zootechny Institute, 1980; Kwasniewski, 1986; Wieclaw et al, 1990). This latter fact proves that the changes obtained in the immunologic, hematologic and serologic parameters in the rabbits in Groups I and II, as opposed to Group III, resulted from the action of the two experimental factors, that is the Chlamydia antigen and/or the PIMAT regenerator.

Therefore, when analyzing the values of the parameters displayed in tables 1-3/V, one can see that they are highest in the rabbits in Group I, quite distinct in the rabbits in Group II, and lowest in the rabbits in Group III (i.e. the animals that were not exposed to the action of PIMAT or the Chlamydia Psittaci antigen).

A detailed analysis of the parameters observed in the group I rabbits, in comparison to the control group (III) animals, revealed that a stable, statistically valid increase started as early as the 7th to 14th day of the experiment and the growth was observed in almost all immunological indices, i.e. those indices which represented both the nonspecific cellular and humoral immunity, and the specific humoral immunity as well (evluated on the basis of the amount of serum immunoglobulins. This increase continued until the 42nd-56th day of the observation, that is the end of the experiment. In comparison to the identical parameters specified for the rabbits in Group II, i.e. the ones exposed to the Chlamydia antigen only, the changes in Group I are by far bigger and more regular, and they start several weeks earlier and continue (in all cases) 1-2 weeks longer (see table 2). It may be thus concluded that the growth in the immunological parameters in the animals under investigation took place because of the presence of PIMAT. These findings prove that PIMAT has a positively stimulating effect on a rabbit's immune system , even when the rabbit is infected with an extremely latent virus (see Parts I and II).

Table 2/V (immunological tests results) and table 3/V (serologic tests results) show again that PIMAT has a stimulating effect on the immunity system, even if it is 'burdened' with as complex an antigen as Chlamydia. Table 3/V proves beyond any doubt that it is the PIMAT regenerator that very distinctly stimulates the synthesis of the specific anti-Chlamydia antobodies, which fact is the fundamental testimony that the PIMAT regenerator is very effective in stimulating the specific antidisease immunity. Moreover, it is worth noting that the regenerator not only triggers a larger synthesis of the antichlamydia antibodies, but that this synthesis takes place almost 4 weeks earlier (see table 3/V) than in the case of the animals stimulated exclusively by the Chlamydia antigen (see table 3/V for the time of appearance of the positive titer in the antibodies of the antichlamydia in Groups I and II).

To conclude the description of the effect of PIMAT on the rabbits' immune systems, it should be mentioned that the results obtained in the present experiment on the immunization of animals with Chlamydia are extremely interesting and valuable in view of the increased numbers of Chlamydia induced infections in people and animals that have been observed not only in Poland but also woorldwide (cf. Moulder, Marth, Ruczkowska, Choroszy-Krol, Zdrodowska-Iwanov, Zgorniak- Nowosielska, Deptula et al.). It should also be noted that in spite of numerous new technigues, diseases caused by these viruses are still difficult to diagnose (especially if they are latent), treat and prevent from. The overall picture obtained from the present study with PIMAT and the Chlamydia antigen seem to open new prospects for the fight against Chlamydia, which causes so many diseases in people and animals and which is so difficult to treat.

Table 1/V

Mean values of the hematologic indices in rabbits
(1) immunized with Chlamydia (Ch) and exposed to PIMAT's (Group I),
(2) immunized with Chlamydia and not exposed to PIMAT's (Group II),
(3) in the control group (Group III).

Group of animals	Day of test	Erythrocytes 10^{12}/l	Hemoglobin mmol/l	Leukocytes 10^{9}/l	Lymphocytes -1	Granulocytes -1			Monocytes - 1
						Neutrophilic	Acidophilic	Basophilic	
I	1*	3,7	8,3	6,6	0,74	0,23	0,01	0,00	0,02
	7*	4,4	9,0	5,9	0,75	0,22	0,01	0,00	0,02
	14	3,5	7,3	6,9	0,81	0,18	0,00	0,00	0,01
	21	3,5	7,6	6,0	0,76	0,21↑	0,01	0,00	0,02
	28	3,2	7,7	6,1	0,79	0,19	0,00	0,00	0,02
	35	3,6	8,3	7,1	0,81	0,18	0,00	0,00	0,01
	42	3,4	8,1	6,9	0,80	0,18	0,00	0,00	0,02
	49	3,8	8,2	7,3	0,80	0,19	0,00	0,00	0,01
	56	3,5	7,9	7,8	0,81	0,18	0,00	0,00	0,01
II	1*	3,6	8,1	5,9	0,77	0,20	0,01	0,00	0,02
	7*	4,6	8,4	6,3	0,85	0,14 ↓	0,00	0,00	0,01
	14	3,5	7,2	6,1	0,86	0,14 ↓	0,00	0,00	0,00
	21	3,8	7,9	5,9	0,77	0,22	0,00	0,00	0,01
	28	4,0	8,1	5,6	0,80	0,18	0,01	0,00	0,01
	35	3,7	8,2	5,4	0,79	0,18	0,00	0,00	0,03
	42	3,7	8,8	6,5	0,84	0,14	0,00	0,00	0,02
	49	3,9	8,3	7,0	0,81	0,17	0,00	0,00	0,02
	56	4,1	8,6	6,9	0,83	0,15	0,01	0,00	0,01
III	1*	3,7	8,7	5,8	0,84	0,14	0,00	0,01	0,01
	7*	4,3	8,9	5,8	0,77	0,23	0,00	0,00	0,00
	14	4,2	10,1	6,3	0,78	0,21	0,00	0,00	0,01
	21	4,3	10,1	7,8	0,84	0,14	0,01	0,00	0,01
	28	3,9	8,9	8,0	0,84	0,15	0,00	0,00	0,01
	35	4,3	10,1	7,8	0,74	0,18	0,02	0,02	0,01
	42	3,9	8,9	6,8	0,80	0,18	0,00	0,00	0,02
	49	4,0	9,1	7,2	0,81	0,17	0,00	0,00	0,02
	56	4,1	9,2	7,6	0,83	0,16	0,01	0,00	0,00

Legend: ↑↓ - statistically valid increase or decrease of the parametr examined In relation to the control group
* - day the antygen was administered

Table 2/V

Mean values of the hematologic indices in rabbits
(1) immunized with Chlamydia (Ch) and exposed to PIMAT's (Group I),
(2) immunized with Chlamydia and not exposed to PIMAT's (Group II),
(3) in the control group (Group III).

Group of animals	Day of test	Capability of			% of NBT '+' cells	MPO activity coefficient	LSM mg/l	IG in ZST units	Total protein g/l
		Adherence (%)	Absorbence						
			Absorbence index	% of absorbing cells					
I	1*	17,5	9,3	19,0	13,8	1,7	10,5	25,7	51,3
	7*	28,1 ↑	10,4 ↑	20,0	18,2 ↑	1,9	18,3 ↑	29,0	48,5
	14	45,5 ↑	9,8	25,0 ↑	19,9 ↑	2,3 ↑	19,1 ↑	32,3 ↑	60,3
	21	65,1 ↑	11,9 ↑	28,7 ↑	19,8 ↑	2,7 ↑	15,1 ↑	31,9 ↑	53,9
	28	63,2 ↑	9,9 ↑	25,7 ↑	17,9	2,4 ↑	17,2 ↑	30,9 ↑	57,3
	35	60,1 ↑	10,2 ↑	30,1 ↑	25,3 ↑	2,9 ↑	16,1 ↑	33,5 ↑	59,1 ↑
	42	43,5 ↑	9,2 ↑	28,0 ↑	18,4 ↑	3,1 ↑	20,2 ↑	32,5 ↑	61,3
	49	48,1 ↑	8,7	28,3 ↑	18,1 ↑	2,5 ↑	22,1 ↑	34,2 ↑	62,4
	56	43,5 ↑	8,4	26,5 ↑	18,5	2,7 ↑	17,5 ↑	30,7	65,8
II	1*	18,5	7,9	17,4	14,5	1,3	13,1	25,8	54,7
	7*	29,5 ↑	8,3	15,3	16,5 ↑	2,9 ↑	16,2 ↑	23,5	57,5
	14	31,7 ↑	9,8	28,1 ↑	16,5	2,1 ↑	16,9 ↑	32,8 ↑	60,3
	21	25,2	8,9	29,3 ↑	18,4 ↑	1,8	17,1 ↑	32,4 ↑	65,4
	28	45,5 ↑	8,7	18,3	17,1	2,5 ↑	18,2 ↑	31,5 ↑	57,3
	35	34,4 ↑	7,9	27,1 ↑	18,1	2,4 ↑	15,2 ↑	27,6 ↑	56,7
	42	33,5 ↑	9,1 ↑	28,2 ↑	19,1 ↑	2,1 ↑	14,3	28,1	60,1
	49	34,5 ↑	8,8	19,5	19,3 ↑	1,9	11,2	29,1 ↑	59,2
	56	38,5 ↑	8,4	19,2	17,6	2,3 ↑	12,8	29,5	54,5
III	1*	15,8	8,1	15,1	13,5	1,8	11,5	22,9	59,1
	7*	19,9	6,2	15,4	12,5	1,6	11,2	23,2	48,4
	14	13,4	8,7	17,5	13,5	1,5	12,7	21,2	57,5
	21	18,6	9,5	14,9	14,6	1,4	10,3	19,4	58,1
	28	21,0	7,9	15,5	16,1	1,7	13,3	19,4	55,4
	35	18,3	7,5	18,6	16,4	1,1	9,8	19,2	48,5
	42	17,9	7,0	17,2	13,8	1,4	13,4	23,1	55,4
	49	19,5	8,1	18,3	12,3	1,6	12,8	20,7	56,7
	56	18,4	8,4	15,1	17,4	1,5	11,3	22,4	53,1

Legend:
MPO - myeloperoxidase
LZM - lysozym
IG - immunoglobulin in turbidimetric units
↑↓ - statistically valid increase or decrease of the parametr examined in relation to the control group
* - day the antigen was administered

Table 3/V

The antichlamydia antibodies titer in the CFT in the three groups of rabbits tested.

Day of test	Group of animals	Serum delutions					
		1:2	1:4	1:8	1:16	1:32	1:64
1*	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
7*	I	+++	++	+	+	+	+
	II	+	-	-	-	-	-
	III	-	-	-	-	-	-
14	I	++++	++++	+++	++	+++	+
	II	++	+	+	-	+	-
	III	-	-	-	-	-	-
21	I	++++	++++	++++	++++	+++	++
	II	++	+++	++	++	++	+
	III	-	-	-	-	-	-
28	I	++++	++++	++++	++++	++	++
	II	++	++	++	++	+	+
	III	-	-	-	-	-	-
35	I	++++	++++	++++	++++	+++	+++
	II	++	++	+++	+++	++	+
	III	-	-	-	-	-	-
42	I	++++	++++	++++	++++	+++	++
	II	++++	++++	++++	++++	++	+
	III	-	-	-	-	-	-
49	I	++++	++++	++++	++++	+++	+++
	II	++++	++++	++++	++++	++	+
	III	-	-	-	-	-	-
56	I	++++	++++	++++	++++	++++	++++
	II	++++	++++	++++	++++	+++	+
	III	-	-	-	-	-	-

Legend: ++++ - complete agrest of hemolysis – positive reaction

+++ \
++ } – partial agrest of hemolysis – questionable reaction
+ /

\- - complete hemolysis of blond cells – negative reaction

* - day the antygen was administered

Table 4/V

The clinical condition of the rabbits and the temperature and humidity values in the rooms in which the animals were kept.

Day of test	Group of animals	Temperature of animals (in °C) and number of breaths	Animal behavior	Room temperature (in °C)	Room humidity (in %)
1	I II III	standard	no change	17 18 16	76 80 82
7	I II III	standard	no change	18 17 17	54 50 68
14	I II III	standard	no change	15 17 18	55 60 66
21	I II III	standard	no change	17 18 19	56 58 60
28	I II III	standard	no change	20 19 18	60 58 55
35	I II III	standard	no change	17 19 21	60 60 58
42	I II III	standard	no change	20 18 19	57 59 55
49	I II III	standard	no change	17 20 19	60 61 58
56	I II III	standard	no change	19 18 16	60 65 60

7. Conclusions

1. The regenerator of vital forces, named PIMAT, which is the subject of the present study, improves - to a statistically valid degree - the immunity of rabbits immunized with Chlamydia Psittaci.
2. Under the present study, the growth in the activity of the immune systems of rabbits immunized with as complex an antigen as Chlamydia shows that PIMAT affects the immunity system not only in a general, but also essential and specific way.
3. The results obtained from the present experiment , as well as from the two previous ones (see Chapter VIII) - all of which tested the effect of PIMAT on the immunity systems of rabbits with and without latent viruses - reveal that the regenerator of vital forces (PIMAT) under the present examination shows an essential, general and specific stimulating effect on both the nonspecific and the specific cellular and humoral immunity.

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Head
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VI. EXPERT'S REPORTS ON EFFECTS OF PIMAT ON CHOSEN PLANT AND ANIMAL ORGANISM - studied in the Chair of Genetics, University of Szczecin

Issued by the Chair of Genetics of the Natural Sciences School, Szczecin University, Szczecin (Poland).
Report written by Professor Roman Zielinski

1. The effect of stress on blood pH in Crucian Carp, Carassius auratus

The aim of the experiment was to determine the effect of PIMAT on blood pH in crucian carp subjected to a stress factor in the form of toxins secreted by cyanophyceae of Oscilatoria sp.
Blood pH in fishes decreases under stress as could be demonstrated more than 10 hours thereafter, analysing blood from tail vein. In crucian carp, blood pH in aquarium conditions (time point 0) ranged between 7.5 to 8.0 and decreased to around 7.2 under effect of cyanophyceae toxins. It was assumed that a factor of PIMAT type may alter the reaction of the fish to stress.
For the experiment, uniform fishes were used, originating from **a** single litter, each weighing 7.4 ± 0.2 g. All the fishes were healthy. The original biomass of Oscillatoria sp. in the experiment was 3.52 mg/dm^3. The biomas of cyanophyceae was controlled every two days. The amount of the biomass was established by chlorophyll technique. The experiment was conducted in an aquarium, 30x60x120 cm in size, divided into two equal parts by a septum which prevented migration of fishes only. Two repeats were conducted, analysing a total of 20 fishes. Blood pH was examined after 14 days of the experiment.
Results:
Habitation of crustacean carps in water conditions with cyanophyceae (version without PIMAT) induced stress reaction to cyanophyceae toxins in the form of a decrease in blood pH to 7.265. PIMAT caused further decrease in blood pH to 7.035, the difference being statistically essential (see Table 1/VI).
It is worth adding that during the experiment about 20% of the fishes in the group affected by Oscillatoria sp. but not exposed to PIMAT died (every dead fish was replaced by a new one), whereas all the fishes from the group affected by Oscilatoria sp. and exposed to Pimat survived the 14 days of the experiment.
Conclusions:
1. It was statistically confirmed that the difference in the blood pH parameters in the crucian carps exposed to the cyanophycea toxins of the Oscillatoria sp. type was essential when the fishes were or were not exposed to PIMAT, The cyanophyceae toxins decreased the value of blood pH from approximately 7.5 to 7.265. With an additional effect of Pimat, blood pH dropped further from 7.265 to 7.035.
By making fish sensitive to unfavorable conditions of the environment, PIMAT reinforces the stress action of toxins.
2. It was observed that in the absence of PIMAT 20% of the fishes died because of their exposure to the cyanophyceae toxins, in the presence of PIMAT no deaths were recorded.
This observation proves that PIMAT improves the immunity of an organism to unfavorable conditions of the environment.

Table No. 1/VI
Blood pH parameters in the fishes under the present analysis that were exposed to the stress factor of cyanophyceae toxins of Oscillatoria sp. Groups exposed and unexposed to PIMAT

Fish No.	Blood pH in presence of PIMAT	Fish No.	Blood pH in absence of PIMAT
1	7.10	1	7.25
2	6.90	2	7.30
3	7.00	3	7.30
4	7.20	4	7.20
5	7.10	5	7.35
6	7.05	6	7.25
7	7.10	7	7.25
8	7.00	8	7.25
9	6.95	9	7.20
10	6.95	10	7.30
x:	7.035	x:	7.265

2. The Effect of PIMAT on melanophores in fishes in conditions of stress induced by the presence of cyanophyceae, Oscillatoria sp.

Experiment with crucian carp, Carrassius auratus.
For the experiment 10 fishes were placed in each of two aquaria. Each fish weighed approximately 0.8 g. The experiment was conducted as above.

Conclusions:
In crucian carp melanophores disappeared under effect of PIMAT, as a reaction to the stress inflicted to fishes.

3. The Effect of PIMAT on survival of eggs of crayfish, Astacus leptodactylus in conditions of oxygen shortage

The experiment aimed at determining effects of PIMAT on survival of crayfish eggs in conditions of temporary toxic action in the form of oxagen shortage.

The experiment included egg development time from the stage of embryo with developed heart to the stage of embryo with developed eyes. The experiment was performed in aquaria. In the version with PIMAT and in the version without PIMAT number of eggs was the same in each of four repeats and ranged from 90 eggs in the repeat I to 165 eggs in the repeat IV. For each repeat, number of viable eggs was determined as related to all eggs in the repeat.
The experiment lasted 14 days at the temperature of 14 to 16°C. In the course of the experiment on three occasions oxygen shortage developed, reaching 30% saturation of water with oxygen.

Results:

Decreased oxygen content caused drastic decrease in egg viability. Market differences were observed in egg survival between the versions with or without PIMAT. In PIMAT version the survival was, at the average, 11.9% while in the version without PIMAT it was 1.1% (Table 3/VI).

Conclusion:

PIMAT decreases morality of crayfish eggs in conditions of toxic action of a drastic decrease in oxygen content in cultures.

Table No. 3/VI
Survival of crayfish eggs in conditions of oxygen shortage in versions with or without PIMAT

Number of repeat	Number of diable eggs / number of all eggs	
	PIMAT	No PIMAT
I	11/90	0/89
II	10/111	0/111
III	21/103	1/103
IV	14/165	4/165

4. The Effect of PIMAT on development of crayfish, Astacus leptodactylus

The aim of the experiment was to define effect of PIMAT on development of the crayfish from the stage of an embryo with developed heart to the stage of small crayfish after the first moult.
Troughout the experiment crayfish eggs remained under care of female crayfishes. The experiment was performed on two crayfishes, each of which carried 150 eggs. For the period of experiment, the two females were placed in two separate aquaria. PIMAT was placed under one of the aquaria and the other served as a control. Immediately before the first moult 20 small crayfishes were catched in nets from each of the aquaria, decreasing the number of potentially obtainable crayfishes to 130 in each aquarium. After apperance of young crayfishes four readouts were made after the first moult: stage 0 - apperance of the first young crayfishes, stages after 24h, 48h, 96h. After each readout young crayfishes were catched in nets.

Results:

In the variant with PIMAT, the number of crayfishes after the first moult was higher at each readout than in the variant without PIMAT (Table 4/VI). After 96h of the experiment almost all crayfishes in the PIMAT variant were already after the first moult (129 young crayfishes per 130 eggs) while in the variant without PIMAT only less than half of the crayfishes (64 young crayfishes per 130 eggs) were after the first moult.

Conclusion:

PIMAT stimulated development of the crayfish from the stage of an embryo with developed heart to small crayfish after the first moult.

Table No. 4/VI
Number of young crayfishes after the first moult in experiment with and without presence of PIMAT

Readout time	Number of young crayfishes	
	PIMAT	No PIMAT
stage 0	13	5
stage after 24 h	36	10
stage after 48 h	24	19
stage after 96 h	56	30
	Σ = 129	Σ = 64

5. The Effect of PIMAT on development of amphibia from the stage of egg to the stage of larva - tadpole.

The experiment was performed on amphibian eggs hauled in nets from a single water tank. The eggs were mixed to take into account possible effects of different temperature during their development in the tank. After mixing, the eggs were placed in an aquarium divided by a partition into two equal parts. The partition prevented translocation of eggs but permitted water exchange between the two. PIMAT was placed under one half of the aquarium. Equal number of eggs was placed in each half of the aquarium. Each day at the same hour number of eggs was counted which transformed into the larval stage -tadpoles. The monitoring aimed at determining time needed for egg transformation in the presence of PIMAT and in its absence. Temperature was the principal factor, affecting directly larval development. Before setting up the described above experiment it was found that environmental temperature must amount to 16 ±1°C (for eggs of this and only of this tank) in order to detect differences in amphibian development, reflecting PIMAT action.
At the beginning of the experiment, the aquarium 36x16x25 cm contained small amount of water, which was, approximately, 2 cm deep. In the course of the experiment and upon appearance of larvae the aquarium content was supplemented with algal concentrate, added to each side of the aquarium in equal amounts. In the course of the experiments a succession could be observed, of other organisms developing in the specific environment of amphibian development. Algae were noted to propagate more rapidly in aquarium part over PIMAT than in the other part . Plankton crustaceans, Daphnia appeared more rapidly in the part over PIMAT. The part contained also more feces even if each side of the aquarium was stocked with the same number of tadpoles. In parallel, cultures were maintained in three such aquaria.

Table No. 5/VI

Version (part of aquarium)	Number of experi-ment	Eggs number	Time (days)							
			1		2		3		4	
			number of		number of		number of		number of	
			larvae	eggs	larvae	eggs	larvae	eggs	larvae	eggs
PIMAT	1	37	5	32	5	32	10	27	10	27
	2	30	4	26	6	24	12	18	12	18
	3	32	3	29	5	27	13	19	14	18
w/o PIMAT	1	36	3	33	3	33	3	33	3	33
	2	31	1	30	2	29	3	28	4	27
	3	34	2	32	3	31	4	30	4	30

After development of larvae and of undeveloped eggs, the tadpoles were catched in nets in both parts of the aquarium, mixed and placed again in the aquarium, in equal numbers in the part over PIMAT and the other part.

Results:
A higher rate of frog larva appearance was noted in the PIMAT version as compared to the control version. After calculating means for the three repeats of the experiment the following larva numbers were obtained for the consecutive days after laying out 33 eggs in each of the version (with PIMAT and without PIMAT, calculated from the data of the above Table):

	with PIMAT	without PIMAT
1st day	4.0	2.0
2nd day	5.3	2.7
3rd day	11.7	3.3
4th day	12.0	3.7

The data have shown that the rate of larva appearance is 2 to 3-fold faster over PIMAT than in control conditions. In the photographs, larger accumulation of larvae can be observed and a higher amount of feces in the version with PIMAT than in the control version.
Conclusion;
PIMAT stimulates the rate of larva appearance in the frog.

6. Effect of PIMAT on biomass increase in Cyanophyceae of Microcystis genus

The experiment aimed at determining effect of PIMAT on increase in number of Cyanophyceae of Microcystis gennus in course of their 10 days culture in aquarium. Water for the culture originated from Bylice Male lake, belonging to eutrophic lakes in its autumn post-mixion period. PH of the water from the lake was adjusted to 9.0 using $Ca(HCO_3)_2$. The cultures were run in aquaria, at room temperature of 20-22°C and in a natural room light. To increase water content of CO_2 the cultures were bubbled. The number of Cyanophyceae was estimated by estimating algal units (1 algal unit, a.u., corresponded to 20 Microcystis cells) and by determining volume of Cyanophyceae in Inhoff funnels.
Three experiments were performed, each including samples with and those without PIMAT.
Experiment I:
Six aquarias, each 10 l in volume, were seeded with Cyanophyceae in the amount of 6 milions a.u. Three aquarias were underlayered with two PIMATs each while the remaining three aquarias served as a control. The results are listed in Table 6/VI. In each aquarium over PIMAT the produced biomass was at an average 220% greater as compared to the aquaria with no PIMAT under them (biomass expressed in a.u.). The volume of algae in aquaria with PIMAT was greater by 24% (Table 6/VI).
Experiment_II:
Two aquaria, each 20 l in volume, were seeded with 3 millions a.u. per liter. Two PIMAT sheets were placed under one of the aquaria. In the aquarium over PIMAT 2000 millions a.u. were obtained while the controllaquariuni yielded only 900 millions a.u. (Table 6/VI).
Experimert III:
Two aquarias, each 50 l in volume, were seeded each with Cyanophyceae at 3 millions a.u. Under one of them six PIMATs were placed. The aquarium yielded 2500 millions a.u. and the control aquarium only 500 millions a.u. (Table 6/VI).
Discussion_and_conclusions;
Analogous results were obtained in experiments I to III, pointing to stimulatory effect of PIMAT on increase in cell number of Cyanophyceae in the course of their 10 day aquarium culture. In the experiments I and II the increase amounted to 220% and in the experiment III it was even 500%, giving an average advantage of PIMAT cultures of 310%. Mocrocystis genus Cyanophyceae seem to represent a promising material in studies on the effect of PIMAT on biological objects.

Table No. 6/VI
Biomass production by Cyanophyceae of Microcystis genus in presence or in absence of PIMAT

Number of experiment	PIMAT		NO PIMAT	
Number of aquarium	Number of Cyanophyceae in mln a.u.	Volume of Cyanophyc. in cm^3	Number of Cyanophyceae in mln a.u.	Volume of Cyanophyc. in cm^3
I/1	5000	4.0	2000	2.0
I/2	4500	3.5	1900	2.8
I/3	3500	3.3	2000	2.9
x:	4300	3.6	2000	2.9
II/1	2000	-	900	-
III/1	2500	-	500	-

7. Pure cultures of algae and estimation of their growth rate using biomass measurements by chlorophyl technique (spectrophotometer readout) and by counting the cells under microscope

The experiment was performed on monocellular algae of Scenedesmus sp. of Chlorophyta group in order to determine its growth rate in presence and in absence of PIMAT.

7.1 Description of the experiment

200 cm^3 medium, prepared according to the earlier given procedure as for cultures of water thyme, was placed to each of 10 beakers, each 400 cm^3 in capacity. In each beaker the medium was seeded with the same, small amount of algae of Scenedesmus sp. (approximately, 0.5 million algal units). Five beakers with Scenedesmus cultures were placed on glass-covered PIMAT while the other five cultures were placed over control sheets. The two groups of beakers were placed into separate incubators, of identical temperature (24°C) and light conditions, The algae were cultured for 14 days using bubbling of the cultires with air to supplement CO_2.

7.2 Discussion and conclusions

Following 14 days of culture, amount of biomass was estimated by measuring medium transparency using Snell's instrument and counting of algae as described by Zadin (1966). The data are shown in Tables 7 , 7A /VI.

After 14 days of culture, biomass of Scenedesmus was definitely greater in cultures in presence of PIMAT, as indicated both by transparency measurements and by counting of algae.

Culture transparency, calculated as an average value between two marginal estimates amounted to 3.75 (marginal values 2.0 and 5.5) in cultures in presence of PIMAT and 13.75 (marginal values 7.5 and 20.0) in cultures in absence of PIMAT. Thus, the difference reached, approximately, 360%.

Number of algae in cultures with PIMAT was decissively higher in the presence of PIMAT which is fully consistent with earlier results. Mean difference in algae number in the experimental set-up with PIMAT and that without PIMAT was 600% with advantage of the former. In the experimental se-up with PIMAT ,samples 4 and 5 were positioned beyond the edge of PIMAT. Visually, the samples differed from the remaining three cultures standing over PIMAT by being more lightly green, which was later confirmed by the results. The observation seems interesting as it may point to variable effect of PIMAT on the biological object depending upon its distance from PIMAT.

The obtained differences between experimental system with presence of PIMAT and that without PIMAT are uneguivocal, indicating that it is purposeful to continue the experiment. In the future, however, certain modifications should be introduced to the experimental system to make it a model, fully reproducible system:

- the medium should be standardized, excluding broth and tap water and substititing them by solid, strictly measurable mineral compounds, dissolved in distilled water or, better, deionized water,
- the experimental set-up with and without PIMAT should be
repeated in at least three experiments,
- in the case of positive result in the above set-up, i.e. in the case of differences observed as in the present experiment, a new experimental system should be introduced, involving PIMAT influenced samples and focused on pinpointing PIMAT effects on samples in various places over PIMAT and beyond it,
- all aspects of the experimental system should be described, including:
a) physicochemical composition of medium before and after experiment: estimation of redox potential, pH content of minerals,
b) estimation of medium transparency for all samples,
c) estimation of algae number in medium, using the available techniques, including chlorophyl technique.

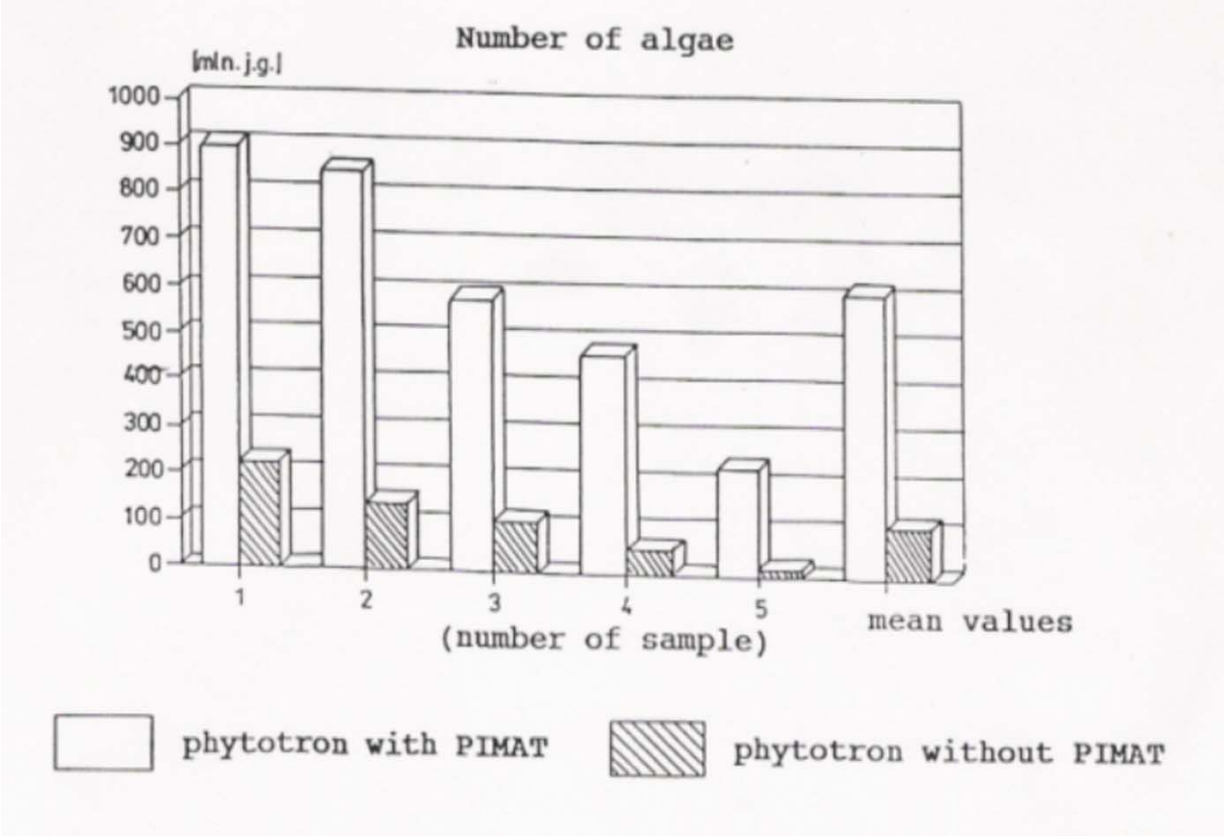
Table No. 7/VI
Examples of medium transparency values in Scenedesmus cultures in presence and absence of PIMAT (for each experimental system maximum and minimum values of medium transparency are given)

Scenedesmus cultures in presence of PIMAT	Medium transparency cm	Scenedesmus cultures without PIMAT	Medium transparency cm
1	2,0	1	7,5
5	5,5	5	20,0
X:	3,7	X:	13,7

Table No 7A/VI
Biomass production by monocellular Scenedesmus algae in presence and in absence of PIMAT
a) I - readout after 5 days of culture (in algal units)

PIMAT	NO PIMAT
100 mln a.u.	100 mln a.u.
550 mln a.u..	50 mln a.u.
550 mln a.u.	0,50 mln a.u.
500 mln a.u..	0,10 mln a.u.
200 mln a.u..	0,50 mln a.u.

b) II - readout after harvesting the culture (in algal units)



8. Growth rate of filamentous algae of Spirogyra genus and Physilogical test for metabolic rate in Spirogyra, measured by

The experiment aimed at determining effect of PIMAT on the rate of green mass growth in Spirogyra, attempting to correlate it with uptake of orthophosphate and nitrate ions from the medium. Approximately 0.5g algae were cultured in pratt's medium, consisting of 0.1g KNO_3, 0.01g K_2HPO_4, 0.01g $MgSO_4.7H_2O$-0.01g, $FeCl_3.6H_2O$-0.01g, supplemented with the settled tap water to 1 l. The algae were cultured in glass beakers, in 200 ml medium. Five beakers were placed on PIMAT while the other five were incubated without PIMAT. The cultures were kept in a room, in identical temperature and light conditions. Green mass increase was monitored using electronic top loaded balance while amounts of orthophospates and nitrates were established according to the Polish Norm PN-89, C-04537/02 and PN-73, C-64576. The cultures were set up on 15th December, 1992. The first weighing was conducted at the same day and the last one - on 7th January, 1993 (Table 8/VI). Ion levels were measured for samples 1 to 5 with PIMAT and, separately, for samples 1 to 5 without PIMAT, together for each group, on 11 January, 1993.

Discusion and conclusions:

Growth rate of Spirogyra algae was five-fold higher after one month of culture in the presence of PIMAT. In the presence of PIMAT, weight increase in green mass ranged in various samples between 0.153g and 0.487g. At the absence of PIMAT. the increase ranged from 0.012g to 0.119g (Table 8/VI).

Cultures kept in presence of PIMAT exhibited greater uptake of orthophosphates and nitrates from the medium. Cultures kept in presence of PIMAT and those without PIMAT contained in the medium 0.63 and 0.97mg PO_4/l and 0.24 and 0.37mg NO_3/l, respectively (Table 8A/VI).

The results point unequivocally to the effect of PIMAT on growth rate and uptake of the analyzed

ions. However, responsible expertise as to the effect of PIMAT on the described above experimental set-up with Spirogyra would require that experiment be conducted thrice and the experimental system should broadened by circadian characteristics of the analyzed ions, pH and redox potential of the medium.

Table No 8/VI

Increase in green mass in Spirogyra algae in presence and in absence of PIMAT

No of sam-ple	PIMAT			No of sam-ple	NO PIMAT		
	15.12.92	7.01.93	Increase (g)		15.12.92	7.01.93	Increase (g)
1	0.551	0.704	0.153	1	0.523	0.642	0.119
2	0.455	0.691	0.236	2	0.472	0.484	0.012
3	0.448	0.935	0.487	3	0.314	0.347	0.033
4	0.544	0.821	0.277	4	0.365	0.410	0.045
5	0.426	0.640	0.214	5	0.464	0.509	0.045
x:			0.273	x:			0.051

Table No 8A/VI
Ortophophosphate and nitrate content in medium after Spirogyra culture in presence or in absence of PIMAT

Sample pool 11.01.93	PIMAT		NO PIMAT	
	PO_4 (mg/l)	$N0_3$ (mg/l)	PO_4 (mg/l)	$N0_3$ (mg/l)
1	0.63	0.24	0.97	0.37

9. Effect of PIMAT on increase in Diatomae biomass

The experiment was planned in the idea to suggest a simple experimental system which could be used by interested persons to re-examine PIMAT action, requiring no particular biological knowledge or laboratory conditions.
The material originated from a bottle used to water plants. The sediment on the bottom of the bottle includes Diatomae and algae which, used for a further culture, develop into layers. The sediment can be washed out the bottle and, after mixing, can be used to seed beakers / jars with boiled water at room temperature. The jars can be placed close to the window in the setups with and without PIMAT. After a few days, up to a week, the outgrowth appears, the intensyty of which may be estimated by naked eye.
In our experiment, we have seeded the suspension from bottle bottom to 10 beakers, the half of which was cultured in presence of PIMAT while the rest served as a control. Biomass increase was estimated using algal units. As compared to PIMAT-free system, the PIMAT set-up showed an increase in

biomass higher by 30% (Table 9/VI).
Before recommending the experiment, it should be repeared a few times.

Table No. 9/VI
Increase in Diatomae biomass in culture with PIMAT underlay or without it

No of sample	PIMAT mln a.u.	No of sample	No PIMAT mln a.u.
1	200	1	160
2	500	2	150
3	450	3	170
4	180	4	170
5	150	5	160
x:	296	x:	162

10. The effect of PIMAT on assembling of invertebrates on artificial substrate

The experiment aimed at determining differences in settling on an artificial substrate, in the form of appropriately prepared boxes, of invertebrate animals in course of half-year long exposure at the lake bottom. The boxes were made of pine boards and their dimensions were 20x26x21 cm. From top they were covered with a net to prevent invertebrate animals assembling in the boxes from being preyed upon. Bottom of each box was covered with crushed gravel, which provided substrate for the settling animals. The experiment was performed in three replicas. The boxes were placed at the depth of 2 m, at the bottom of Insko Male lake, just behind the reed range, in November, 1992 and they were exposed till May 1993.
Results:
Mean results for the three replicas are shown in Table 8/XII. Numbers of indyviduals of given species were definitely higher in the version with PIMAT. Also biomas was much greater in each of the species in the version with PIMAT.
Pimat stimulates settling of agueous invertebrates on artifical substrate and induces increase in their biomass.

Table No. 10/VI

Effect of PIMAT on invertebrate animals settling on artificial substrate

TAXON	VERSION A with PIMAT			VERSION B without PIMAT		
	mean number	mean biomass /g/		mean number	mean biomass /g/	
		of individual	total		of individual	total
Asellus aquaticus	21	0.011	0.231	30	0.0040	0.1200
Orconectes limosus	1	0.868	0.868	1	0.3990	0.3990
Hirudinea	3	0.101	0.303	1	0.1510	0.1510
Chironomidae	35	0.0043	0.172	35	0.0007	0.0245
Epheroptera	40	0.0043	0.172	32	0.0033	0.1056
Hydropsyche sp.	15	0.0026	0.039	7	0.0030	0.0210
Trichoptera without Hydropsyche	7.5	0.1400	1.050	3	0.0300	0.0900
Turbellaria	3	0.0081	0.024	1.5	0.0078	0.0117
Other inverte brates	30	0.0110	0.330	11	0.0100	0.1100

VII. THE EFFECT OF PIMAT UPON THE GROWTH OF SELECTED BACTERIA AND YEAST STRAINS [Research carried out at the Vocational Medical School in Szczecin]

Reports from PIMAT users on the product's therapeutic action gave rise to the hypothesis that it affects microorganisms responsible for certain diseases. The research in the Microbiology Laboratory of the Vocational Medical School in Szczecin were started in October 1992. The statistical analysis of the results proved beyond any doubt that PIMAT does have an affect on the growth of bacteria strains.

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THE EFFECT OF PIMAT UPON THE GROWTH OF SELECTED BACTERIA AND YEAST STRAINS

Research carried out in the Microbiology Laboratory of the Vocational Medical School No 1 in Szczecin

1. Preface

PIMAT is a piece of linen of 18 cm x 18 cm in size, with points specially inscribed on it.
According to the inventor of PIMAT, its action is based on the energetic effect of geometric configuration (EEKG -the name introduced by professor J. Mazurczak, or neoenergy, the name brought into practice by Dr. S.V. King). EEKG or neoenergy is the effect of a shape (geometric configuration) upon matter. It should be underlined that, in spite of a great number of research being carried out the nature of this phenomenon has not been explained from the physical point of view, i.e. has not been measured by conventional methods. For the characteristics and evaluation of neoenergy, radiesthetic colours are used. The radiesthetic colour is an agreed-upon-notion which means that a given wave length corresponds with a particular colour.
The PIMAT is defined as a 'stamina regenerator' (regenerator of vital forces). This results from the fact that the PIMAT generates the whole spectrum of radiesthetic colours necessary for a human organism to maintain its health. The additional feature of the PIMAT is the wave being emitted, which removes harmful radiation from the organisms and neutralizes the radiation characteristic of water-courses [1]. The beneficial action of the PIMAT is confirmed by an opinion of J. Wilczewski, Eng., from the Biotronic and Electrophotographic Laboratory at Kielce, reached in the course of his electrophotographic tests, as well as by radiesthetic expertises.
A lot of people using the PIMAT informed us about additional energizing and curative effect of the device upon their organisms.
All the above mentioned facts have resulted in the hypothesis that the PIMAT also exerts its influence upon microorganisms. That action can be responsible for the abatement of disorders in the human organism.

2. Objectives

The objective of the present research was to examine the effect of the PIMAT upon the growth of selected strains of bacteria and yeast. Strains isolated from patients of the Regional Hospital Complex No 1 in Szczecin were used for that test.

3. Experimental

3.1 Materials

Microorganisms

The following pure cultures of microorganisms isolated from patients at the Regional Hospital Complex No 1 in Szczecin were used for the research:
a) Escherichia coli
b) Staphylococcus aureus
c) Streptococcus pyogenes
d) Candida albicans
e) Pseudomonas aeruginosa
f) Bacillus subtilis

Media

Liquid media:
A) Enriched broth manufactured by the Vaccine and Serum Plant in Warsaw.

Composition:

meat extract	0.4g
casein enzymatic hydrolyzate	5.4g
yeast hydrolyzate	1.7g
peptones	4.0g
sodium chloride	3.5g

(for 11 of 7.2 pH medium)

B) Sugar broth

common broth, 7.8 pH	1000ml
glucose	10g

Solid media

A) Enriched agar manufactured by the Vaccine and Serum Plant in Warsaw.

Composition:

peptons	4g
meat extract	0.4g
casein enzymatic hydrolyzate	5.4g
yeast hydrolyzate	1.7g
sodium chloride	3.5g
agar - agar	10.0g

(for 11 of 7.2 pH medium)

B) blood agar

Composition:

enriched agar	1000ml

5% solution of sheep blood corpuscles (7.2 pH)

C) Sabourand medium Composition:

peptons	10g
glucose	40g
agar - agar	8g

(for 1 l of 5.8-6.0 pH medium)

All the media were sterilized for 20 minutes at 117°C.

3.2 Methods

Pure cultures of individual microorganism species were used for tests. When 18-hour culture was obtained, it underwent several dilutions in liquid media, with geometric progression from 10^{-1} up to 10^{-6} . To avoid mistakes samples of a given dilution stage were divided into two and thus series for examination and checking of the same density were obtained (see fig.1). The 10^{-6} dilution was taken to make qualitative samples on solid medium which, after 24 hour incubation period, served to determine the density of a given culture at a starting point.

The examined series of dilutions was incubated for 24 h at 37°C or 28°C under the action of the PIMAT. The control series of dilutions was incubated under the same conditions, in a separate room without the PIMAT.

After the incubation, the intensity of growth and its nature were examined as well as quantitative evaluation was made by means of inoculation on the solid medium. Besides, the density of suspended solids in both the samples was determined.

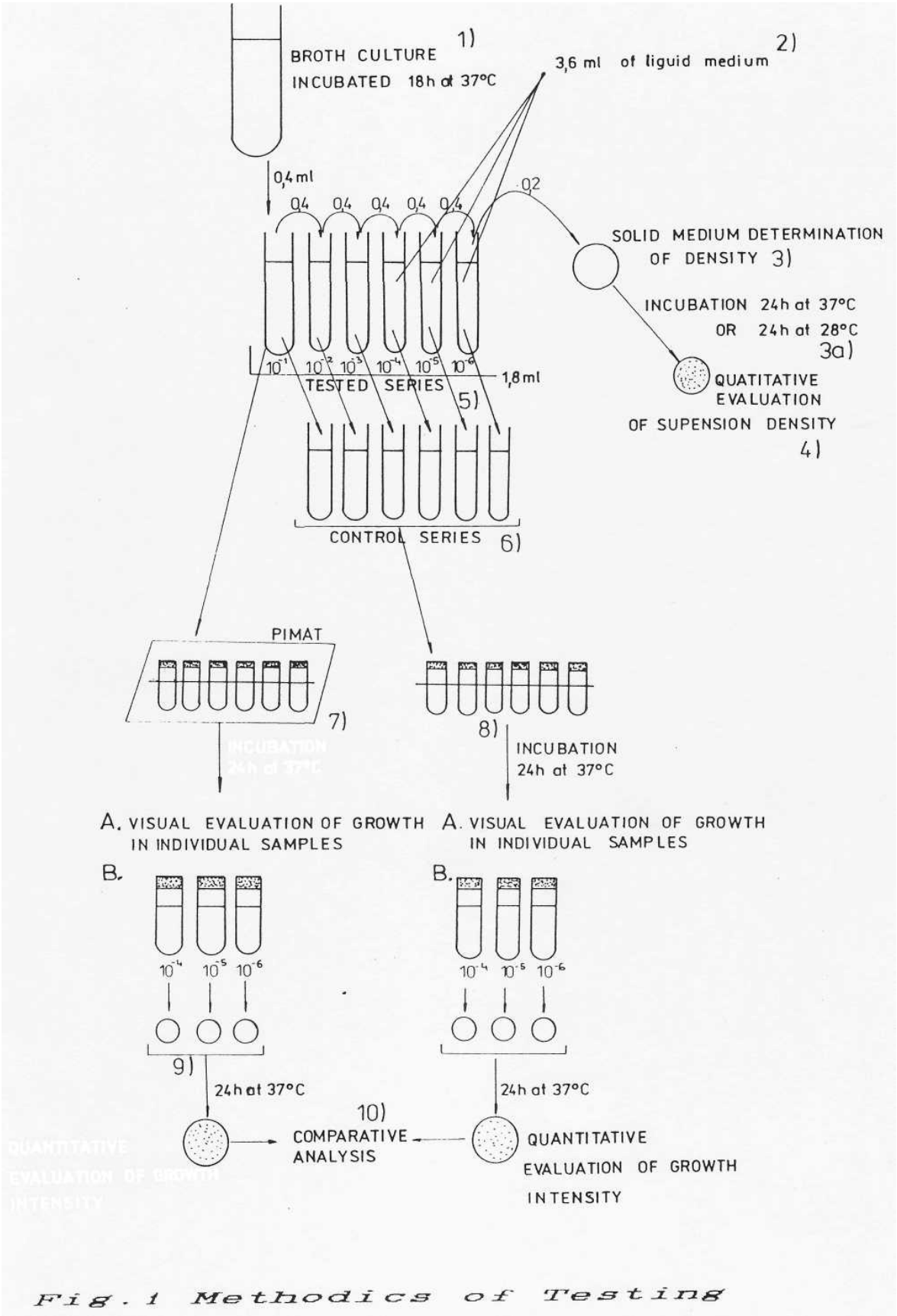

Fig. 1 Methodics of Testing

Table No. 1/VII

SPECIES	No of test ser-ies	INITIAL STATE			SIMPLE TESTED AFTER 24 h of PIMAT's ACTION			CONTROL SAMPLE	
		Density of suspension prior to PIMAT action [q-ty/ml]	No of cases	%	Density of suspension	No of cases	%	Density of suspension after 24h of incubation w/o PIMAT	%
S.aureus	34	$6.5*10^8$-$8*10^9$ $4*10^9$-$4.5*10^9$ 10^{15}	27 6 1	79.4 17.7 2.9	0 $2*10^7$-$6*10^7$ 10^{15}	24 9 1	70.5 26.4 2.9	10^{12}-10^{15}	100
S.pyogenes	20	$4*10^8$-$8.5*10^8$ $2*10^9$-$5*10^9$	17 3	85 15	0 $5*10^7$-$8*10^7$ 10^{14}	14 5 1	70 25 5	10^{12}-10^{15}	100
E.coli	34	$1.5*10^{10}$-$3*10^1$ $8*10^8$-$4*10^9$	15 19	44.1 55.9	$6*10^7$-$1.4*10^9$ 0 10^{15} after 48h: $5*10^6$-10^7 0 10^{15}	32 1 1 29 4 1	94.1 2.9 2.9 85.3 11.7 2.9	10^{12}-10^{15}	100
Candida albicans	10	$1.2*10^9$-$2.2*10^9$ $4*10^8$-$9*10^8$	7 3	70 30	0 10^{12} after 72h: 0 $2*10^7$-$6*10^{12}$ 10^{12}	9 1 3 6 1	90 10 30 60 10	0 10^{13} after 72h: 10^{14}	60 40 100
P.aeruginosa	4	$6*10^8$-$5*10^9$	4	100	0	4	100	10^{10}	100
B.subtilis	5	$2*10^9$-$3*10^{10}$	5	100	0 10^{14}	4 1	80 20	10^{14}	100

3.3 Results

The aim of this work was to estimate the influence of the energy of shape on the growth of microorganisms. The experiments were carried out in four stages:

- obtaining of pure cultures of individual species
- obtaining of two dilution series: test series and control series
- incubation of the test series under the influence of the PIMAT and incubation of the control series without the PIMAT's action
- quantitative determination of intensity of growth of the test and control samples and comparative analysis.

At the first stage of research the tests on solid and liquid media were made. The results of the PIMAT's effect on the growth of microorganisms on the solid media were very difficult to interpret, therefore further research is connected with the PIMAT influence upon the liquid cultures. The results of the PIMAT effect on the growth of selected species in liquid cultures are shown in Table No 1. Besides, the table includes the series of tests which results considerably varied from those obtained earlier. Since there was a suspicion that this series of tests was performed with the use of the PIMAT defective from the radiesthetic point of view, that device was examined. Ryszard Olszak, the PIMAT's inventor, did not know for what reason the device was to be tested. Finally, it was found that this Pimat was radiesthetically useless. Besides, it was found to have red stains destroying its shape, apart from the typical red points. Microorganisms, as all other organisms, are constantly influenced by various environmental conditions. However, not all of them react to a given factor in the same manner. Their feature is great tolerance to various external conditions. The effect of different physical and chemical conditions is well-known and of great importance. Those factors are: temperature, osmotic pressure, surface tension, pH, ultrasonic wave action and various kinds of radiation. The PIMAT is a configuration of points on a plane which emits the energy of shape. The operating mechanism of that energy is still unknown. Maybe, that initial research, the results of which are presented herein, will serve for the beginning of determination of the energy of shape. During the tests all the species were given similar conditions necessary for their growth. It means that the influence of versatile external conditions was eliminated. That is why the results are comparable and indicate that the energy of shape affects the growth of selected bacteria. The action depends on the species: it is stronger in case of S. aureus, S. pyogenes and P. aeruginosa, moderate in case of C. albicans and weaker in case of E.coli.

4. Conclusion

The results obtained allow to draw a conclusion, that the action of PIMAT is subtle, which is of great importance for the maintenance of proper balance of bacterial flora in the human organism. Ryszard Olszak, the Pimat's inventor, recommends in some cases to make breaks in the use of the PIMAT. Many diseases have their cause in the loss of the organism biological balance, penetration of microorganisms into the organism or their toxic activity. Another group constitute disorders which are not caused by microorganisms. Basing on information received from the PIMAT users, its effect can be diversified. That is why the research should be complemented within the following range:

1) to extend the spectrum of the microorganism species being examined in order to precise the range of the PIMAT suitability as one of elements of therapy for illnesses breeded by those microorganisms.
2) to determine the influence of the PIMAT upon the course of the humoral and cell-mediated response of the organism to the bacterial, mycotic and virus diseases.
3) due to the bigger sensitivity of protoplasts and spheroplasts to the action of the external factors to define the influence of the PIMAT upon those objects and its effect on their reversability. That research could make it possible to recognize changes in particular cellar structures under the influence of the energy of shape and to find the analogies for the operation of particular ranges of electromagnetic wave spectrum.
4) to determine the possible influence of the PIMAT upon the course of mutation of the genetic material, which can result in the correction of biotechnological features of microorganisms.

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Statistic analysis of the effect of PIMAT upon the growth of select bacteria and yeast strains – Anova 2 Programme (research carried out at the Main School of Farming in Warsaw)

VIII. STATISTIC ANALYSIS OF THE EFFECT OF PIMAT UPON THE GROWTH PROGRAMME OF SELECTED BACTERIA AND YEAST STRAINS - ANOVA 2 [Research carried out at the Main School of Farming in Warsaw.]

The research described in Chapter III was repeated at the Main School of Farming in Warsaw.
The same experimental procedure and methodology were employed.
Additionally, a statistical analysis of the results obtained was made.
Main School of Farming
Department of Mathematical and Experimental Statistics
Computer Laboratory
J.Gorczynski
1. Research results and their statistical analysis
ANOVA 2 PROGRAMME
Calculations made on 04.02.1992.
Name of characteristics
Factor A: Pimat
Factor B: bacterial species
A = 2 B= 10 N = 5
Y transformation = yes version : A-B

Table of variance analysis

Variability	df	Ms	Femp
Factor A	1	16.6000	238.41**
Factor B	9	62.6625	899.96**
Interaction A-B	9	1.1545	16.58**
Error	80	0.0696	

Mean vectors and matrices
Mean vector for factor A
5.48 6.29
Nir = 0.11

Mean vector for factor B
5.95 6.02 7.39 7.29 5.44 5.43 8.85 8.91 1.78 1.77
Nir = 0.39

Mean matrix for interaction A-B

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
A1	5.11	5.35	7.36	7.22	4.83	4.77	8.19	8.37	1.77	1.79

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
A2	6.79	6.70	7.43	7.35	6.05	6.09	9.51	9.45	1.79	1.74

Nir <A/B> = 0.33
Nir <B/A> = 0.55
Mean vectors and matrix after retransformation.
Mean vectors and matrices
Mean vector for factor A
28.98 38.57
Mean vector for factor B
34.37 35.29 53.65 52.09 28.57 28.50 77.34 78.37 2.18 2.12
Mean matrix for interaction AB

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
A1	25.10	27.61	53.11	51.14	22.33	21.79	66.08	68.98	2.13	2.20

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
A2	45.04	43.88	58.20	53.05	35.56	36.09	89.46	88.34	2.22	2.04

B1 - Staphylococcus aureus

B2 - Staphylococcus aureus
B3 - Bacillus subtilis
B4 - Bacillus subtilis
B5 - Pseudomonas sp.
B6 - Pseudomonas sp.
B7 - Escherichia coli
B8 - Escherichia coli
B9 - Candida sp,
B10 - Candida sp.

Statistic elaboration of experimental results was made by way of double-factor variance (ANOVA 2), with the use of the Pimat as one factor (at two levels: A1 + Pimat; A2 - Pimat) and bacterial species as the other (at 10 levels B1 - B10)

2. Conclusions

Different reaction of bacterial species to the presence of the PIMAT was found. Certain species (Staphylococcus B1, B2; Pseudomonas sp B5, B6, E. coli B7, B8) were statistically proved to breed worse in the presence of the PIMAT than without it. However, in case of the remaining bacterial species examined (Bacilli B3, B4; Candida B9, B10) no statistical difference in the microorganism growth was observed with or without the PIMAT.

IX. THE EFFECT OF PIMAT ON THE MUTAGENIC ACTION OF SELECTED CHEMICAL COMPOUNDS MEASURED WITH THE AMES TEST

All living cells are subject to mutation. The cell, however, is not passive to these chanages. The research described below has revealed that PIMAT can help intensify the cell's defensive reaction against certain carcinogenic mutagens.

1. Research results and their statistical analysis

ANOVA 2 PROGRAMME
Calculation made on 07 .01.1992.
Name of characteristics : number of TA98 revertants
Factor A : Pimat
Factor B : Mutagens
without transformation version: A-B

Table of variance analysis

Variability	df	Ms	Femp
Factor A	1	100.8200	2.78
Factor B	4	265913.8700	7333.53**
Interaction A-B	4	187.6700	5.18**
Error	40	36.2600	

Mean vectors and matrices
Mean vector for factor A
160.24 157.40
Nir = 3.44

Mean vector for factor B
105.10 63.40 449.30 90.10 86.20
Nir =7.69

Mean matrix for interaction AB
A1 114.20 63.60 448.80 89.90 84.80
A2 96.00 63.20 449.80 90.40 87.60
Nir<A/B> = 7.70

Nir<B/A> = 10.88

ANOVA 2 PROGRAMME
Calculation made on 07.01.1992.
Name of character : number of TA9 7 revertants
Factor A : Pimat
Factor B : Mutagens
A = 2 B=5 N = 5
without transformation version : A-B

Table of variance analysis

Variability	df	Ms	Femp
Factor A	1	1971.9200	17.06**
Factor B	4	265075.6000	2292.84**
Interaction AB	4	972.3200	8.41**
Error	40	115.6100	

Mean vectors and matrices
Mean vector for factor A
158.48 145.92
Nir = 6.15

Mean vectors for factor B
105.7 0 48.80 440.90 92.70 72.9 0
Nir = 13.74

Mean matrix for interaction AB

A1 127.60 48.40 441.00 92.20 83.20

A2 83.80 49.20 440.80 93.20 62.60

Nir <A/B> = 13.75
Nir <B/A> = 19.43

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The Head of Department Prof. dr Stefan Russel

2. Conclusions

The number of revertants evoked by various mutagens is reduced (the reduction being statistically essential) in the presence of PIMAT only in the case of certain mutagens. This conclusion applies both to the TA97 and TA98 strains.
A statistically essential reduction in the number of revertants was noticed in the TA97 strain exposed to PIMAT in relation to two mutagens : DOWMYCIN and BENZOPYRONE.
For the TA98 strain a statistically essential reduction of revertants exposed to PIMAT was noted in relation to only DOWMYCIN.

3. A commentary to the analysis on "The effect of PIMAT on the mutagenic action of selected chemical compounds measured with the Ames test" made by the Main School of Farming, Warsaw
Szczecin 07/15/1992

The goal of the present analysis was to determine, by means of the Ames test, the effect of PIMAT on the

mutagenic action of selected chemical compounds on the standardstrains:
- TA97 Salmonella Typhimurium
- TA98 Salmonella Typhimurium

In the analysis histidine dependent strains were used. They were exposed to mutagenic factors of various concentration for 16 hours. After this period of time, comparable amounts of cultures were quantitatively and qualitatively evaluated as to the mutational, genotypic and phenotypic changes that have taken place. Tables 1 and 2 show the number of revertant cells mutagenically changed in the 10^{-5} concentration.

Table 1/IX.
TA 98 Salmonella Typhimurium test strain.

MUTAGEN	Concentration	PIMAT exposed sample	Control sample
		Number of reverants [No./ml]	
Dowmycin	6 mg	91	110
		95	115
		83	116
		103	119
		108	111
Mitomycin C	0.5 mg	66	65
		68	68
		61	53
		62	63
		59	69
Sodium azide	1.5 mg	445	441
		460	450
		451	448
		453	456
		440	449
2-amino-fluorene	10 mg	95	91
		90	85
		93	88
		86	90
		88	95
Benzopyrone	1 mg	88	85
		86	86
		85	70
		89	90
		90	93

Table 2/IX.
TA 97 Salmonella Typhimurium test strain.

MUTAGEN	Concentration	PIMAT exposed sample	Control sample
		Number of revertants [No./ml]	
Dowmycin	6 mg	65 71 98 85 100	124 132 145 126 111
Mitomycin C	0.5 mg	63 40 50 48 45	67 37 55 38 48
Sodium azide	1.5mg	448 462 428 431 435	451 438 421 450 445
2-amino-fluorene	10 mg	94 95 83 96 98	96 92 98 90 85
Benzopyrone	1 mg	62 70 61 65 55	88 95 71 79 83

The statistical evaluation of the results irrefutably proves that the presence of PIMAT reduces the mutegenic action of certain mutagens.
Each of the standard strains reacts idiosyncratically to various mutagens and each of them impedes the action of mutagenes to a varying degree. In the case of the TA97 Salmonella Typhimurium, it was found out that in the presence of PIMAT the reduction of the mutagenically modified reverents in relation to Dowmycin and Benzopyrone was statistically essential; in the case of the TA98 Salmonella Typhimurium strain, the reduction was statistically essential in relation to Dowmycin.

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X. CERTIFICATE OF POLISH POLISH PSYCHOTRONICS SOCIETY HEAD OFFICE

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Ref. No. 313/92 Warsaw 07/07/92

CERTIFICATE

1. Reason for evaluation
Subject to evaluation is the product called "PIMAT Regenerator of Vital Forces".

2. Object of certification
The PIMAT Regenerator of Vital Forces is a 18x18cm square cloth made of white cotton fabric and having red dots of 1cm in diameter, as well as the word PIMAT, printed on it.

3. Action
The red dot geometrical configuration printed on the white square is to act, according to the assumptions of its creator, on two levels:
- physical, by energizing the human organism,
- mental, by regulating the work of the nervous system.

4. Mode of application
As an object of personal use, PIMAT should be placed print up in a bed under a sheet, blanket or mattress (not thicker than 25 cm) at the sacrum area.
PIMAT doesn't lose its potency of action (irrespective of a person's body position during sleep or relaxation) unless physically damaged.
PIMAT can be laundered in temperatures up to 40°C and ironed.

5. Testing procedures
PIMAT was tested for three months by a group of Bioenergy Therapy and Radiesthesy Experts from the Polish Psychotronics Society.
PIMAT was examined by radiesthetic measurement methods, as well as during the regular usage as instructed by the inventor.
PIMAT cloths were also given to a group of persons currently in bioenergy treatment; all of them suffered from various kinds of ailments and were regarded as particularly sensitive. Of this group, eight persons were not aware of the presence of PIMAT's - the cloths had been secretly placed in their beds to eliminate self-suggestion in the informants.

6. Test results

No unfavourable action of PIMAT's was found throughout the test's duration.
The radiesthetic measurements carried out confirmed that the geometrical pattern formed by the red dots on the fabric square generates so-called radiesthetic colours, i.e. energy waves of a definite length which influence man's organism.
The inventor of PIMAT made use of the shape radiation phenomenon that is well known and has been extensively described in radiesthesy. PIMAT generates energy waves described in radiesthetic terms as radiesthetic colors:

Radiestetic Color	Average Contribution in percentages	Action Diameter in cm	Intensity in 50 cm Diameter
Positive green	58%	100	80%
Blue	32%	100	60%
Orange	3%	60	impulses 15%
Red	2%	50	impulses 8%
Indigo	1.5%	50	impulses 2%
Remaining colors	3.5%	100	60%

The measurement results further presented are mean values, the measurements being done with a variety of biometers and other well-known radiesthetic methods.
The intensity of wave radiation is strongest within the 50cm diameter range.
From the point of view of chromotherapy, the energy waves emitted affect the human organism by purifying and toning it up (positive green), by exerting an analgesic and anti-inflammatory action on it (blue), by invigorating (orange) and stimulating it (red), and by toning up the nervous system (indigo).
The action of PIMAT is too weak in comparison to the harmful radiation that may occur. The average intennsity of harmful radiation from an averaged water course is 30 units (SRW scale) within the range of one meter. In housing buildings, however, the averaged intensity of these radiations is by 3 to 4 times higher. In order to neutralize such radiation, a radiation of the same or higher intensity and of an adequate wave length should be generated, or there should be a possibility to transform these energies. Measured in the SRW scale, the intensity of radiation emitted by PIMAT is 0.75 to 3 units - a correct value for PIMAT to favourably affect the human organism (uninterrupted emission). PIMAT can not, however, transform or divert harmful outer radiations.

7. Expertise

Based on the tests and measurements carried out, as well as the opinions from PIMAT users, it can be stated that PIMAT reveals
- no unfavourable influence on the human organism;
- no action that would neutralize the harmful geopathic radiation, or that would protect against it.
PIMAT favourably acts
- on the general sense of a person's well being by energizing, purifying and strengthening his\her

organism, as well as by aiding in other beneficial processes;
- to alleviate backaches, headaches, muscle pains, and neuralgia;
- on a person's sleep;
- on a person's blood pressure.

PIMAT should be placed closest possible to the human organism (preferably under a white sheet).
Hereby, the Polish Psychotronics Society certifies the PIMAT Regenerator of Vital Forces.
The certificate is issued for the specimen of PIMAT as described in point 1. of the present document. It is recommended that instructions for use (with all the modifications as shown in the enclosed material) should accompany the product.
The Polish Psychotronics Society should be notified of every modification introduced to PIMAT by its inventor, so that the Society's experts can reevaluate the product.

President
Head Office
Polish Psychotronics Society
Zofia Telesinska-Bratek, M.Sc

Enclosure:
Instructions for use

Enclosure
REGENERATOR OF VITAL FORCES
- regenerates stamina and removes fatigue;
- regulates organic functions;
- alleviates backaches, headaches, muscle pains, menstrual pains and neuralgia;
- cures sleeplessness and excessive sleepiness;
- improves a person's general feeling.
PIMAT is a unigue Polish invention based on the principle of the energetic effect produced by a geometrical configuration.
PIMAT generates a spectrum of radiesthetic colours indispensable for the human organism to maintain a healthy condition. From the point of view of radiesthetic chromotherapy, a person's condition - weakness or illness -is nothing else but a disturbance in the radiesthetic colour in an organism. Additionally, PIMAT emits a wave which removes harmful radiation from the organism.
PIMAT has a beneficial effect on the human organism -irrespective of a person's age - on two levels:
- physical, by energizing the organism,
- mental, by regulating the work of the nervous system.
The PIMAT regenerator of vital forces is extremely easy to use. There is no time limit for its application - it can be used uninterruptedly or at time intervals. Having removed it from the plastic bag, PIMAT should be placed print up under a bed-sheet at the sacrum area. Irrespective of the user's position during sleep or relaxation in bed, he/she is exposed to the therapeutic action of PIMAT.
As PIMAT is an object of personal use, it should not be shared with or resold to anyone.
PIMAT retains its potency for an unlimited time, unless physically damaged (e.g. torn).
PIMAT HAS HELPED MANY PEOPLE — WHY DON'T YOU TRY IT!
PIMAT is beneficial for a person's general sense of well being by energizing, purifying, strengthening and stimulating the organism.
PIMAT alleviates radicular pains, backaches, headaches, muscular pains, menstrual pains and neuralgia.
PIMAT has a beneficial effect on sleep by eliminating sleeplessness or excessive sleepiness,and by regulating the work of the internal organs.
PIMAT regulates blood pressure and improves one's general feeling.
PIMAT affects the human organism - irrespective of a person's age - on two levels:
- physical, by energizing the organisn,
- mental, by regulating the work of the nervous system.
Depending on an organism's needs, it has either a tonic or stimulating effect.
Mode of application:
Remove PIMAT from the plastic bag and place it print up under a bed-sheet at the sacrum area.

PIMAT does not lose its therapeutic potency irrespective of a person's position during sleep or relaxation in bed.
As PIMAT is an object of personal use, it should not be shared with or resold to anyone.
If a bed is shared, each person should have a PIMAT of his/her own.
PIMAT's action is unlimited in time, unless physically-damaged.
PIMAT can be laundered in temperatures not exceeding 40°C and ironed.
PIMAT is a product examined by a group of experts from the Polish Psychotronics Society in Warsaw, ul. Noakowskiego 10/54.
PIMAT is a product certified by the Polish Psychotronics Society.

XI. ELECTROPHOTOGRAPHIC TESTS ON PIMAT

Every living organism radiates energy, thus producing around it a specific electromagnetic biological field, called biofield. The biofield is manifested by an aura, whose degree of completeness indicates the state of the bodily stamina. If the body is weakened, exhausted, or ill, the surrounding aura is incomplete and irregular. If, on the other hand, the body is strong and fully energized, it is surrounded by an aura that is completely filled out.
On June 17th, 1991, the Biotronics and Electrophotography Laboratory in Kielce started an experiment with the purpose of proving the effectiveness of PIMAT as a radiesthetic screen and its impact on the formation of the human aura. This experiment made use of the so-called 'Kirlian effect'.

POLISH PSYCHOTRONICS SOCIETY
KIELCE DIVISION
LABORATORY
Biotronics and Electrophotography
Engineer JANUSZ WILCZEWSKI
Ul. Bukowa 16/19,
25-542 K i e l c e

EXPERT'S OPINION

on the Regenerator of Stamina named PIMAT (second, fabric version), based on electrophotographic tests (so-called Kirlian effect). Manufacturer: Mr. Ryszard Olszak

1. Object tested
The object under investigation was PIMAT - Regenerator of Stamina produced by Mr. Ryszard Olszak. PIMAT is a piece of fabric linen, its edges turned in (the hem width is 7 mm)— of 18cm x 17.5cm in measurements. There is the name PIMAT printed on the upper part of the cloth; the phrase 'All rights reserved Ryszard Olszak' is placed in the mid-bottom section of it. All these labels are in black ink. In addition, the cloth has red dots of 10mm each. There are 10 such dots in all distributed close to the edges of the cloth (see the xeroxed picture). No print can be found on the reverse side of the canvas — only elements from side one show through it. This is the side where the Laboratory's expert placed his seal.

2 Scope of the test
The test was to determine whether or not the above described object is useful as a 'regenerator of vital forces', and/or as a possible radiesthetic screen affecting the human aura.

3. Testing methods
The Kirlian photographs were taken with a camera of the following electric field parameters: v - 35kV, F=150kHz. They were shot in the setups as enumerated below:
- PIMAT incorporated into an electrode system (photos 1-3)
- PIMAT in the camera's electric field (photos 4-5)
- PIMAT in a corona discharge flux (photos 6-7)
- PIMAT and its direct action on aura (photos 8-14)
- PIMAT's affect on aura when applied onto the human sacrum (photos in part II, 1-17)
Field exposure times were 0.5 sec. and 1 sec. The photo shooting parameters are provided in part II (photographs).

4. Results

When incorporated into the Kirlian camera electrode system, PIMAT reveals features of a nonconductor without an aura of its own. It also has insulating characteristics for a high frequency field, which fact can be seen in photographs 1-3. One can easily distinguish PIMAT's contours, as well its other components - — print and dots.

In a high frequency field, PIMAT reveals a clear outline of its shape, as well as the remaining components, i.e. print and dots. In this case one can again see that the cloth is an insulator, which creates a certain barrier to a high frequency field (photos 4-5).

Likewise, in a corona discharge flux field, PIMAT behaves like an insulating element, its top and reverse sides both acting as perfect insulators for the flux (photos 6-7).

Photograph 8 shows an aura around the fingers of the right hand taken directly on a photosensitive material. One can easily notice the texture of the material - PIMAT is made of linen. The aura, however, becomes less distinct but more filled out. The same phenomenon can be noticed in photographs 10 and 11. In addition, these photographs show a larger and more complete aura (see the encircled auras). Thus, it follows that when used directly to take a photograph of the aura around the fingers, PIMAT enlarges and completes the aura.

Photographs 1-17, part II of the visual material, display the formation of an aura around the fingers under PIMAT's influence on the human body after it had been applied to the sacrum area for 42 hours.

Since PIMAT's application to a human sacrum at 4:00 p.m. on April 17th, 1991, photographs were taken every 1.5 hours. After 6 hours a favourable effect was recorded — a considerable aura enlargement proved that PIMAT has a favourable affect on the human organism. This favourable condition lasted for another 6 hours, after which time the aura broke off and continued to do so for 15 more hours when PIMAT was removed. Within the next 9 hours the aura regained its original shape. The experiment was terminated at 10:00 a.m. on June 19th, 1991.

The person subject to the experiment did not make any complaints throught the experiment's duration.

The material under investigation is good proof of how PIMAT affects the human organism, although a more extensive study on a larger population is recommended.

5. Conclusions

Based on the experiment made with the PIMAT sample provided for the present expertise, the following conclusions can be made:

PIMAT (in its fabric version) can be used as a 'first aid' radiesthetic screen; yet, its insulating effectiveness should be determined.

PIMAT has a favourable affect on the human aura; yet, its usefulness for a human organism should be individually determined (by radiesthetic means, for example) because the tests that have been carried out indicate to changes in the aura within a time period. Thus, a larger group of people of various auras should be tested with a larger amount of PIMATs. - No unfavourable effects of PIMAT on individuals were detected; therefore PIMAT may be considered to have a 'subtle' impact on the human organism.

Engineer Janusz Wilczewski

(I attach only a few pictures)

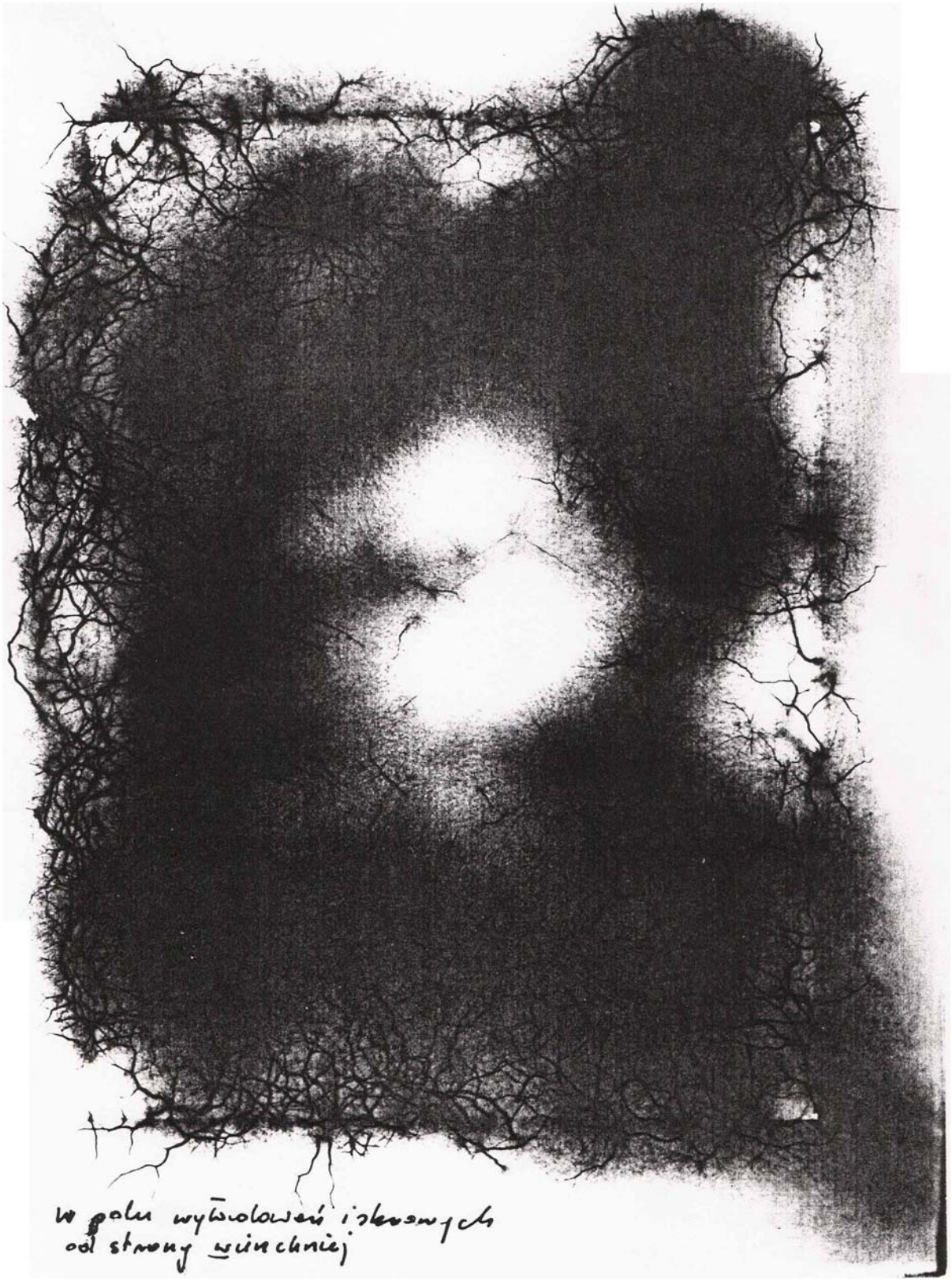

Photo 1.
PIMAT in a spark discharge field from the top side.

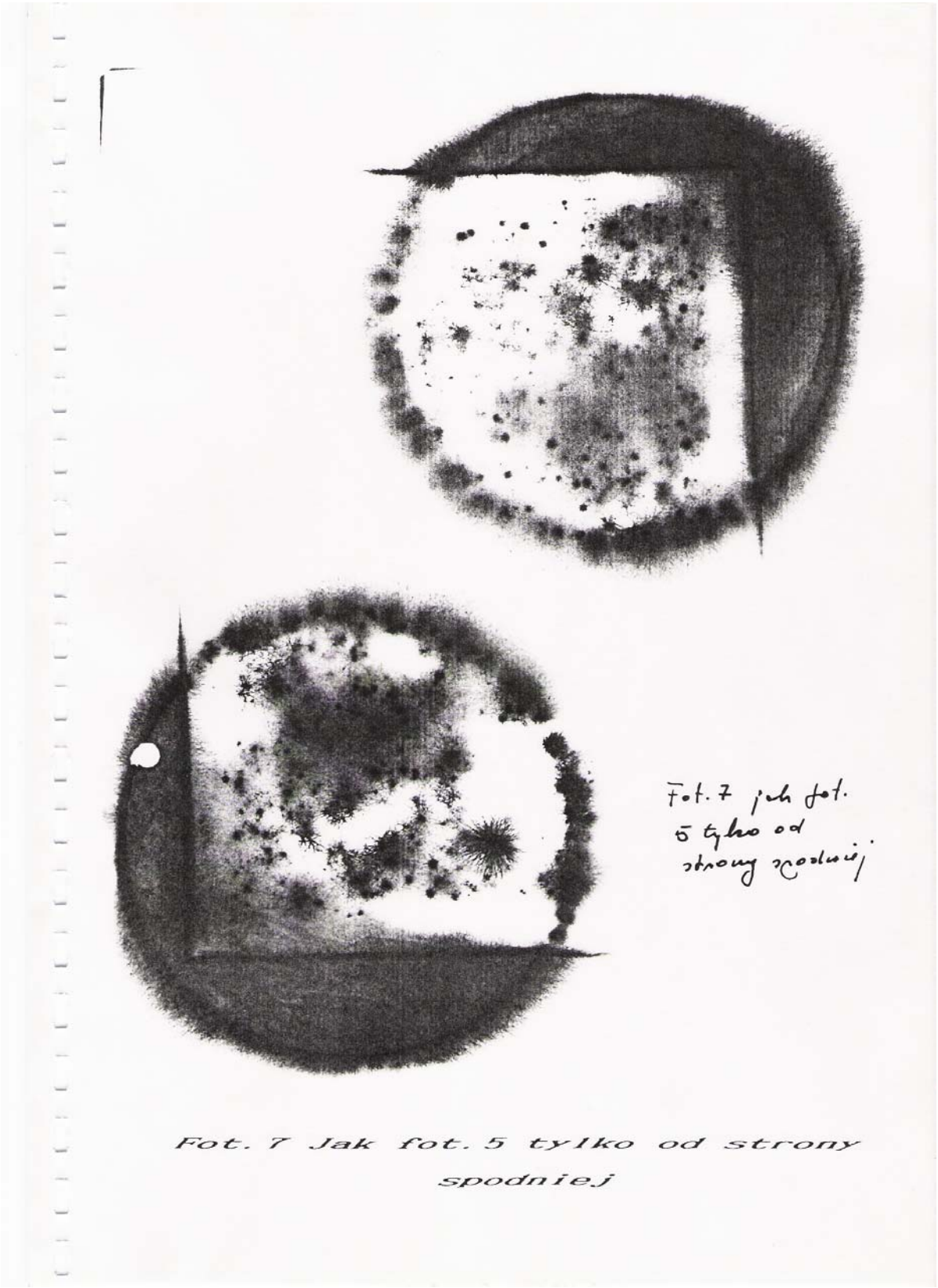

Photo 2.
Aura under the influence of PIMAT .

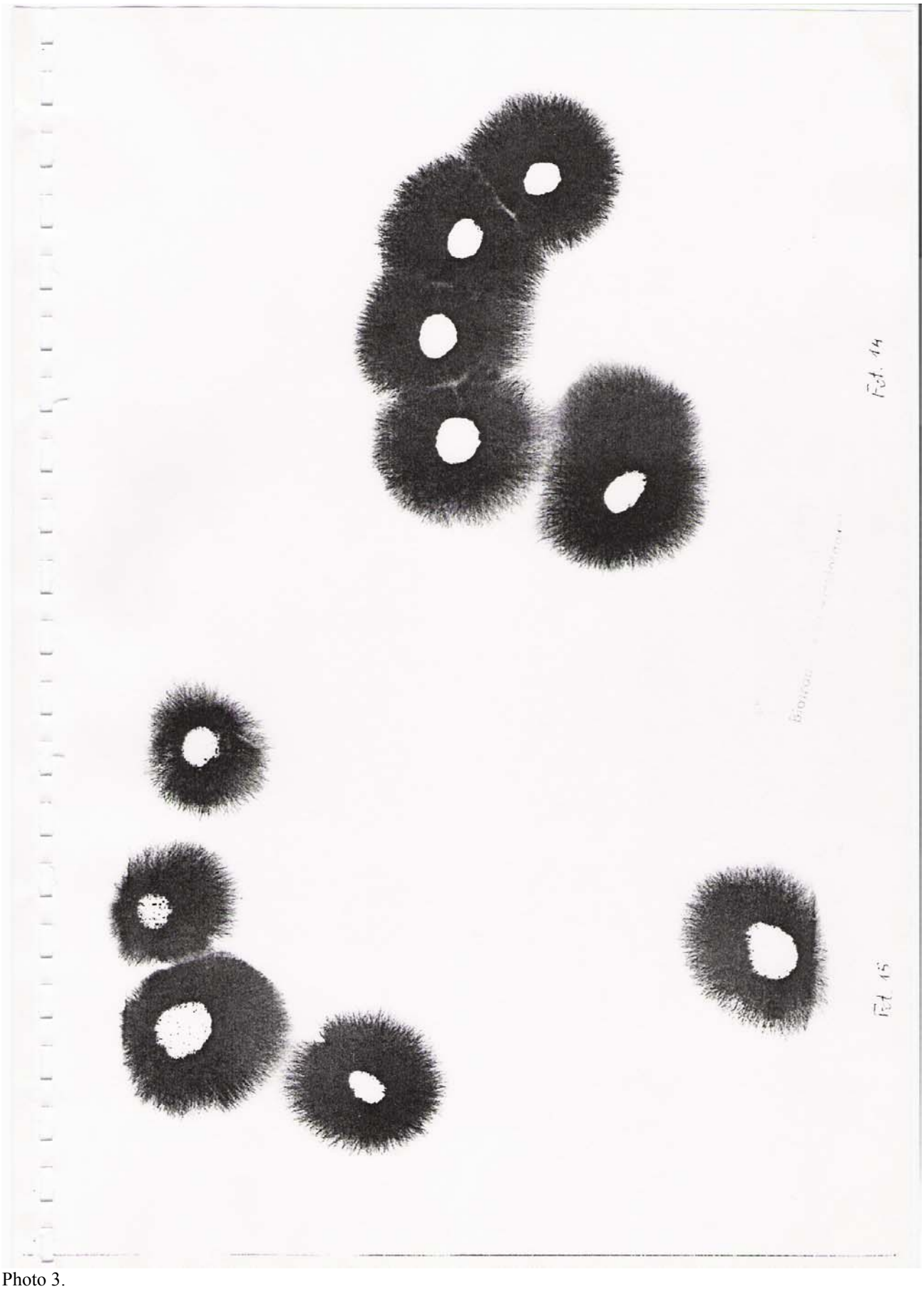

Photo 3.
Pimat and his direct effect on the aura.

Photo 4.
Pimat and his direct effect on the aura.

XII. THE RESULTS OF COMPARATIVE ANALYSIS OF TWO SAMPLES OF FRESCO WINE

As an interesting thing I provide the results of the research conducted in the Centre of Research and Expertise of the Economic Academy in Poznań.

1. The subject of research

The subject of research were two samples of red wine in original bottles closed with a cork. There was a label on the bottle with the writing:
FRESCO
Semi dolce,
Vino Di Qualita Superiore
0,751 9-1 l°vol and a back label:
Red wine semisweet
There was a letter "L" on one of the labels. The samples of the wine were delivered by the Contractor.

1.1. The results of the research

1.1.2. Evaluation of sensory factors

The sensory analysis has been conducted in a 10-person team according to PN-A-79528-02:1993. The rated factor are clarity, color, smell and taste.
Clarity: the wine samples have been characterized with complete clarity, without sedimentation; no difference between rated samples.
Color: the wine samples have been characterized with dark red color with a delicate shade of violet; no differences between rated samples.
Taste and smell: In the case of smell's and taste's rating the people, who have been rating, have observed significant differences between the samples of wine and wine L.
Wine L has been characterized with the proper for this type of wine, properly developed and well harmonized mixture of various smell-taste values among other: characteristic taste of fruit, taste of alcohol, taste of sweet and sour. The evaluating people emphasized it's delicacy, clarity and intensity.
On the other hand wine L has been characterized with similar characteristics enumerated above, but it's clarity and intensity was far less sensible and visible. The evaluating people most often classified it's smell-taste characteristics as for a "young" wine.
There have been no traces of different smells and tastes in the wine.

Table 1/XII

The rating of physicochemical factors

Factor	Wine	WineL	The change (in %)
Ethyl alcohol (the volume measured in %)	10.6	10.7	0.94
pH	3.57	3.59	0.56
General acidity as expressed in g/dm^3 of tartartic acid	5.53	5.36	-3.07
Volatile acidity as expressed in g/dm^3 of acetic acid	0.56	0.41	-26.79
The content of general essence (based on Tabari's model)	87.3	88.1	0.92
Slag (g/dm^3)	1.86	1.87	0.54
Sulphur dioxide (g/dm^3)			
free	15.36	16.35	6.45
bounded	79.4	76.8	-3.24

Based on research conducted according to PN's orders no distinct differences have been detected between the rated factors between the examined wine samples.
Both wine samples fully meet the requirements of the PN-A-79122: 996 standard in the field of the rated factors.

The researches have been conducted by:
Dr inż. Jerzy Zielnica
Mgr inż. Bogdan Pachołek
Mgr inż. Krzysztof Melski

Final conclusions:
Based on conducted analysis in the case of physicochemical factors' ratings as well as on analysis of airborne substances no distinct differences have been detected between the rated wine samples. Only the evaluation of the sensory characteristics has been better for the wine marked with letter "L".

Signed by
Director
Centre of Research and Expertise
Dr Michał Walenciak

In this statement I would like to emphasize the following facts:
both bottles have been intact,
what is the most important thing for the consumer, the smell and taste clearly for the benefit o the "L" wine (qualities of a mature wine), in opposition to the second "young", in the research of physicochemical factors there are no significant differences, but if one were to look closer, the "L" wine has:

- more ethylic alcohol,
- lower both acidities ,
- higher amount of extract and ash,
- more sulfur dioxide in the free state and significantly more in the combined state.

The "L" wine is a wine that has been kept only for 2 weeks on a specially constructed home wine stand with the use of PIMAT, and the second wine kept normally in a cupboard without a PIMAT.