

# **ECTD\_068**

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## XXIII INTERNATIONAL APICULTURAL CONGRESS

### Moscow, U.S.S.R.

## 27th August to 2nd September 1971

by Eva Crane

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In the past, the International Beekeeping Congresses have been reported fairly fully in *Bee World*. This is no longer necessary, since the Apimondia Publishing House in Bucharest now produces extensive accounts of the proceedings, in several language editions. Moreover, readers who completed the Bee World questionnaire a year ago made it clear that they prefer to learn about bees rather than to read about procedures at meetings, excursions, etc.

We are continuing the practice of listing papers presented to the Congress, knowing that this is valued by many readers. Compared with the last few Congresses, a shift of interest is apparent—away, for instance, from bee diseases and poisoning, and towards the exploitation of bee products. This is to some extent linked up with the fact that a "Symposium on the use of bee products in human and veterinary medicine" was held as part of the Moscow Congress. The Symposium itself reflects the present policy of beekeeping and bee research in the Soviet Union and other countries of Eastern Europe, which together contributed 65% of the Congress papers. West Germany (BRD) contributed 9% and the rest of the world the remaining 26%—only 6% being from Englishspeaking countries.

In the list below, papers are grouped under broad subjects (with UDC numbers appended), as in earlier *Bee World* Congress reports. The author's name is followed by the page number in the English "Summaries of papers"; similar collections of Summaries were published in French, German, Russian and Spanish. Page numbers marked "s" refer to the book of English summaries relating to the Symposium mentioned above. (Fourteen further papers, of which no summaries were published, were included in the programme.) Any papers which give new information not available elsewhere will be dealt with individually in *Apicultural Abstracts*.

## Beekeeping Organizations 638.1

Kodon, S. (57) On the activity of working groups of Apimondia

GASSPARIAN, S. (37) Proposals for improvement of international co-operation in apicultural research

HILHORST, P. T. (44) Co-operation in beekeeping

Assys, L. (9–10) Legislations on and status of beekeeping in Belgium

GNÄDINGER, F. (39-40) Economics, organization and technology of beekeeping in FRG [West Germany]

SCHMIDTKE, O. (89–90) Beekeeping in German Democratic Republic

SVOBODA, J.† (95-96) Beekeeping in the Czechoslovak Socialist Republic

Kocsis, S. (56–57) Beekeeping in Hungary

NEDYALKOV, S., MITEV, B. & VENOV, B. (71) Organizational structure of beekeeping in People's Republic of Bulgaria

MITEV, B. & MARKOV, M. (69) Interco-operative beekeeping enterprises—an effective form of beekeeping centralization

ANDGOULADZE, D. I. (6) Beekeeping in Georgia [U.S.S.R.]

TIRGARI, S. (99) The present beekeeping in Iran

LEVIN, M. D. (62) Current bee research in the U.S.D.A.

ESCALENTE, O. S. (30) Beekeeping in Latin American countries

#### Honeybees 638.121

LAERE, O. VAN (104) Study of morphology of neuroendocrine system of bees

PETUKHOV, R. D. (77) Tissue amino-transferases and amino acids in bees

KAROLCZYK, J., MAJCHRTZYK, H. & ZAHACZEWSKA, M. (51) On radioactive nuclids in honeybees Apis mellifica

GOLOVNEV, V. I. (40) Streptomycin distribution in bee organism and residual quantities in beekeeping products

Melnichenko, A. N. & Kapralova, O. V. (67-68) Chromosome complexes in somatic tissues of the honeybee at different stages of its ontogeny

ENGELS, W. (29–30) Origin of yolk protein of Apis mellifica

KONCHEV, K., STOIMENOV, V., TODOROV, T. & KOLEVA, P. (58) Non-specific esterases of bee larvae and their importance in beekeeping practice

VIDANO, C. (108-109) Comparison between intestinal microvilli of Apis mellifera and those of other insects

#### Queens 638.121.1

RIHAR, J. (82–83) Priority of Anton Janša (1734–1773) in discoveries on biology and queen rearing

AKOPYAN, N. M. & MARKOSYAN, A. A. (4) Biochemical study of queens obtained in different periods of the season

Sahoval, Y. & Krieg, P. (87–88) Change of queen weight after emergence from queen cell

VESELÝ, V. (107) Studying sperm delay in oviducts of inseminated queens

Koeniger, G. (57–58) Physiological study of spermatheca of the queen (Apis mellifica

ŠKROBAL, D. (93) Alarm pheromone development at different stages of ontogenesis in Apis mellifica queens

#### Workers 638.121.2

DIETZ, A. (25) Changes with age in some mineral constituents of worker honeybees Kropačova, S. & Haslbachova, H. (61) Development of ovaries of worker bees in a colony

ZHEREBKIN, M. V. (112) The inverting capacity of hypopharyngeal glands and honey productivity of bee colonies

SINITSKY, N. N. & LEVCHENKO, I. V. (93) Protein and free amino acid contents in the haemolymph of worker honeybees

SERBAN, M. & PETRESCU-RAIANU, A. (90) Contribution to the cytology of the haemo-

lymph of [the worker honey] bee POPA, L. & CRISAN, I. (79-80) Contribution to the knowledge on proteins of the

winter [worker] bees' haemolymph

#### **Drones (congregation areas)** 638.121.3

BÖTTCHER, F. K. (16) Queen mating places

RUTTNER, H. & RUTTNER, F. (86) Drone gathering places and mating places

## Honeybee Races 638.123

RUTTNER, F. (85-86) Principal characteristics of economically useful species and races of bees

SUBBOTIN, J. A. (94–95) Correlative connections between different characteristics in bees of different origin

SINGER, W. (92) Carniolan bees in Austria and other countries

ROSENTHAL, C. & POPESCU, V. (83–84) Some aspects of variation of biological and productive indices in *Apis mellifera* Carpatica

VELICHKOV, V. (105-106) Winter loss of local bees in Bulgaria

RADOEV, L. (81-82) New data on experimenting [with] mountain grey Caucasian bees in Bulgaria

VESTERINEN, F. (107-108) Southern bees in Finland

BILASH, G. D., MAKAROV, Y. & STROIKOV, S. A. (13–14) The results of comparative study of different bee races in the main zones of the U.S.S.R.

CRAICIU, M. (21) Contribution to the knowledge of the ecotype of the Banat bees ESCALENTE, O. S. & MIRÁS, G. J. (32) The African bee in South America

#### Dionization of the minimum of the function of the south function

The Colony, including Social Behaviour 638.124

CHEREDNIKOV, A. V. (18) Photoperiodic regulation of seasonal phenomena in bee colony

KOENIGER, N. (58) Building of combs by bees

VELTHUIS, H. H. W. (106) Behavioural aspects of the dissemination of queen substances

Kresák, M. (60-61) Effect of some physical factors on bee ontogenesis

YAKOVLEV, A. S. (111-112) Methods of effective use of early egg laying queens under weak honey flow conditions

PRAAGH, J. P. VAN (104) Environmental improvements enabling a stabilized colony life in a bee flight room

#### Communication in Honeybees 638.124.38

PANKOVA, S. V. (75) About signal dances of honeybees

Levchenko, I. A., Bagrii, I. G., Olifir, V. N. & Shalimov, I. I. (62) Mobilizing level of dances in different honeybee races

LOPATINA, N. G. & PONOMARENKO, V. V. (65) Race variability in the signal activity of honeybee in connection with a number of physiological characteristics

EDRICH, W. (28) Honeybee dances under the light source and reduced gravitation effect

ESKOV, E. K. (33) Sound communication signals in honeybee colonies

## Nectar plants 638.132.1

Antsiferova, T. A. (8) Efficiency of nectar plants in beekeeping and in biological plant protection

Rusu, C. & Chirilei, H. (85) The influence of the mineral nutrition on the dynamics

of sugars and the nectar secretion BATTAGLINI, M. & BATTAGLINI, M. (12)

Battaglini, M. & Battaglini, M. (12) Relationship between characteristics of glucide component of fruit tree nectar and pollination activity of *Apis m. ligustica* Spin.

GIRNIK, D. V., CHERYATNIKOVA, T. L. & RUSAKOVA, T. M. (39) Photosynthetic activity and nectar secretion of buckwheat plants

SIMIDCHEV, T. (92) Investigation on sugar spectrum in nectar of some honey plants in connection with collecting activity of honeybee (*Apis mellifica* L.)

JABLONSKI, B. (46) Valuation of honey-productivity of plants at the basis of calculation of visits to blossoms by bees

JANOS, P. (47) Nectar productivity of nectar plants

HARAGSIM, O. (43) Nectar-production and pollen-production of some forest plants Koch, H. G. (55-56) Honey flow characteristics in northern and central Europe

Keresztesi, B. & Halmagyi, L. (52–53) Robinia (*Robinia pseudacacia* L.) as the basis of the marketable honey production in Hungary

KAMENOV, K. (49) Successive nectar blossoms in conditions of intensive agriculture

Petkov, V. & Sachanski, S. (76–77) Fodder and nectar potentialities of annual combined forage and nectar crops

HRISTEA, C. L. (44–45) New methods of improving, preserving and expanding the melliferous sources

## Sources of Honeydew 638.139.2

Cîrnu, I. & Texe, E. (19) The biology and the economic importance of brown Lachnidae of oak tree (*Lachnus roboris* L.)

GALUSZKA, H. & GALUSZKA, A. (35–36) Influence of meteorological factors and of the day time on secretion of honey dew (in *Cinara pectinatae* Nördl.)

SCHEURER, S. (89) Honeydew flow timing and its forecasting in GDR [East Germany]

RIHAR, J. (82) Methods of forecasting honeydew flow in silver fir

#### **Beekeeping Practice 638.14**

KAESER, W. (47) Biology and techniques of beekeeping

Delon, R. (24) Beekeeping economics, organization and technology Puscasu, G. (81) Improvement of organization and management methods

Peroutka, M. (76) The time necessary for attending to bee colonies at industrial apiaries

FORSTER, H. (34) Analysis of the work of a commercial beekeeping enterprise (at Illertissen, with about 1000 bee colonies) by means of net plan method

Cornejo, L. G. & Itzcovich, B. (21) Production cost of honey for the 1969/70 yield in Argentina

KETTNER, H. (54) Contribution to the problem of bee colonies' transportation

#### Hives 638.142

KNAPO, A. (55) Tests of hives made of plastic material

Konstantinovic, B. (59) Types of hives in Yugoslavia

POPOVIC, B. (80) Serbian thermostatic hive

SCHEHLE, E. (88–89) Extensive work method in one-wall supers related to free location of bee colonies [single-walled free-standing hives] in southern Germany

NTENGA, G. (73) Hive developments in Tanzania

MIHALIK, Y. (68-69) Containerization in beekeeping

#### Feeding Bees 638.144

Kepeňa, V. (52) Influence of autumn feeding on the quality of bees

EICKMEYER, K. A. (29) About the replacement of supplies of honey by sugar for wintering and development of bee colonies in early spring

Dreher, K. (27) About the influence of acids in winter feeding on bees

Anghel, G., Rosenthal, C., Caragiani, S., Cosmin, S., Ungureanu, L. & Chivu, R. (7) Dynamics of the flow and pollen stores and possibilities of food supplements during the critical periods

Nowakowski, J. & Borecki, W. (72–73) Preliminary results of research on the effect of peat biostimulator on the development of a bee colony

OERIU, S., CIMPEANU, L. & MARIN, M. (73-74) Experimental data on the folcistein A as a biostimulator for bees

LLUCH, V. G. (17s) Blood plasma enriched by gamma globulin as a valuable therapeutic hive product [from feeding bees]

#### Bee Breeding 638.145.3

WOYKE, J. (110-111) New experimental data in honeybee genetics

GASANOV, SH. S. & BORODACHEV, A. V. (36-37) Effect of some chemical mutagens on phenotypic characters of honeybees

Drescher, W. (27-28) Breeding for polygenic characteristics of Apis mellifica

- BARAC, I. (12) Prospects of the use of the crosses between ecotypes of bees meant to increase honey production
- GASSPARIAN, S. & HEYDARI, S. (37) Genetic studies on local bee colonies of Nadiafabad [Iran] when given queens from abroad
- AVETISYAN, G. A. (11) The effect of inbreeding and interline hybridization of characters of Far-Eastern bees
- DOUHET, M. (26-27) Selection as a method to prevent bee diseases

#### Queen Rearing 638.145.5

- CORNEJO, L. G., ITZCOVICH, B. & BARTOLOME, R. (21) Production cost of gueens for the 1969/70 period in Argentina
- Weiss, K. (109-110) About the use of old queenless nurse colonies for reproduction VELICHKOV, V. (105) Egg laying of queens reared in queenless and queenright nurse
- colonies TARANOV, G. F. (97) Increasing nuclei efficiency in bee breeding apjaries
- Foti, N., Drăgan, M. & Constantin, V. (34) Comparative research on the acceptance of emerged queens and queen cells by the mating nuclei
- Morozov, A. V., Cherevko, Y. A. & Gadelia, N. V. (69-70) Winter rearing of queens and drones under glasshouse conditions
- GHILEZAN, R. (38) The construction features of the new apparatus for artificial insemination of queens

### Bee Diseases and Enemies: General 638.15

- TRETYAKOV, A. D. (101–102) Measures taken in U.S.S.R. for fighting bee diseases CZECH, M. (22) Measures to control bee diseases adopted in Tolna Komitat [Hungary]
- MATUKA, S., AGANOVIC, N. & MATUKA, O. (66-67) Fungi identified in diseased bee colonies TOSHKOV, A., CAMBUROV, G., KARADZHOV, Y. & SHAVANOV, M. (100) Disbacterious
- phenomena in bee colonies
- GROBOV, O. F., ZIUMAN, B. V. & KERIMBAEV, A. K. (41) Tissue culture in studying causative agents of honeybee diseases
- NIEMCZUK, R. & SOBIESZCZANSKA, B. (72) Bee resistance
- LIUTSKANOV, D. (64) Curative syrup and antibiotics
- ESCALENTE, O. S. (31-32) Mallophora ruficauda W.—a dangerous enemy to bees

#### Adult Bee Diseases 638.153

- Tomaszewska, B. (100) Experimental septicaemia caused by Pseudomonas aeruginosa
- TRILENKO, V. A. (102–103) Pathogen carrier state and salmonellosis in bees LIHOTIN, A. K. (63) Changes in bee organs and tissues following intravaginal and other routes of infection with Aerobasidium pullulans (De Bary) Arnaud
- POLTEV, V. I., TALPALATSKY, P. L. & SLAGANIK, R. I. (78-79) Ribonuclease in the prophylaxis of virus paralysis in bees
- ALEKSEENKO, F. M. & VOVK, A. M. (4-5) Age and race resistance of bees to acarine disease and new means of its control

#### Nosema Disease 638.153.3

- SHABANOV, M. & CAMBUROV, G. (91) Studies on nosema disease in the People's Republic of Bulgaria
- HANKO, J. & LEMAKOVA, S. (42-43) Nosema disease in drones
- CAMBUROV, G. & SHABANOV, M. (17-18) Experience on the use of immunofluorescence method in diagnosing nosema disease
- JACOBS, F. (46-47) Studies on the effect of feeding and environmental temperature on Nosema apis Zander in honeybees (Apis mellifica L.)
- Foti, N., Şerbănescu, S. & Crisan, I. (35) The influence of nosema disease on the protein level in the haemolymph of bees (Apis mellifica L.) LAERE, O. VAN (104) Use of diiodohydroxychinoleine to control nosema disease

#### Brood Diseases 638.154

BUZA, L. (17) Foulbrood control in Hungarian People's Republic ARSENOV, L. (8-9) Seasonal fluctuation in American foul brood development at different altitudes

33

- FUROWICZ, A. J. & ZAHACZEWSKA, M. (35) Biochemical investigations and determining of the sensitivity to antibiotics of strains of Bacillus larvae White isolated from cases of *Histolysis infectiosa* larvae in the Katowice Voivodship
- OTTE, E. (74) Bacillus larvae resistance to chemotherapeutic means POLYAKOV, A. A., SMIRNOV, A. M. & KULIKOVSKY, A. V. (79) Sporogenesis of Bacillus larvae and Bacillus alvei and micro-changes of their spores under alkali effect
- NIEMCZUK, R. (72) Effect of disinfectants on Bacillus larvae White
- Rosko, L. (84) European foulbrood in Slovakia
- SMIRNOVA, N. I. (93-94) Cultivation of sacbrood virus in cell culture of bee fibroblasts

#### Bee Poisoning 638.158.2

- LLUCH, V. G. (64–65) Pest control and beekeeping Sofroni, D. (94) Suggestions for a world regulation on honeybee protection from
- pesticides SAFER, G. V. (87) Correlation of bee protection with pest control by insecto-fungicides
- Szili, M. (96–97) Possibilities to control pests by dry aerosols applied to plants in blossom without injuring bees
- BONFANTE, S. (14-15) Integration method of phytophage control securing bees' safety in orchards
- NAZAROV, S. S. (70-71) Pesticides in the honeybee nest and contamination of bee products
- TRUTSCHEL, G. (103) Arsenic toxicosis in Apis mellifica L. and its treatment with medicines
- SHAKARYAN, G. A., DANIELYAN, S. G. & AKOPYAN, Z. M. (91) Chlortetracycline and oxytetracycline in bees, larvae and honey
- HARAGSIM, I. & VANKOVA, J. (43) Pathological effect of endo- and exotoxins of some strains of Bacillus thuringiensis Berliner on the honeybee and its brood

## **Honey: Composition and Properties**

- Rusu, I. (84) Observations on the characteristic features of some honeys
- BATTAGLINI, M., BOSI, G. & ALBORE, G. R. D' (13) Microscopical and physicochemical characteristics of some unifloral Italian honeys
- FINI, V. A. & SABATINI, A. G. (33-34) Characterization of Italian honeys—I: False acacia (Robinia) honeys
- GHILEZAN, G. & GHILEZAN, R. (38) Data on the mineral elements in some honeys Demianowicz, Z. (24-25) Characteristics of fir tree honey on the basis of its micro-
- scopic spectrum and some physico-chemical properties DAGHIE, V., CÎRNU, I. & CIOCA, V. (22-23) Contribution to the study of the bacteri-
- cidal and bacteriostatic action of honey produced by *Physokermes* sp. in the area of coniferous trees GALUSZKA, H., NIEMCZUK, R., SOBIESZCZANSKA, B. & WARDZALA, M. (36) Antibiotic
- activity in honey BATTAGLINI, M. & Bosi, G. (12-13) Determination of glucides by G.L.C. and its
- possibilities for honey qualification WILLSON, R. B. (110) Diastase and hydroxy-methyl-furfural in international food
- regulations—a sequel DREHER, K. (27) Rhodotorula—the reason of a red shade of honey
- PILZ, I., HARY, M. & ILIESIU, N. V. (25s) Honey in synergetical association as a treatment of various affections of mouth

#### Honey: Processing 638.163

Townsend, G. F. (101) Honey processing and packing operations used in America JACHIMOWICZ, T. (46) Guidelines for honey production

KALMAN, C. (48) Some more details on honey processing

Bornus, L. (15-16) Improved technique for honey liquefaction

BUCATA, P. (16-17) Observations on the technological process for the preparation

of cream honey

#### Beeswax 638.171

DOBROKHOTOV, S. A. (26) New technology of crude wax processing Antonescu, C. (7) Procedure for beeswax industrial extraction

PICHA, S. (78) Beeswax as superadditive in photographic litho developers

#### Hive Products: General 638.178

KOSTECKI R. (59-60) Studies on Bacillus larvae and Nosema apis spore detection in honey and wax

PETROY, M. (24s) The effect of treatment of acute and chronical inflammatory diseases of respiratory tracts with the complex of aerosol inhalations with bee venom. honey, royal jelly and propolis

OKADA, I., MATSUKA, M. & HOSHIBA, H. (74) Utilization of drone larvae and pupac as semiartificial diet for aphidophagous insects

#### Royal Jelly 638.178.A

Mačička, M. (65-66) On royal jelly production

JANČI, J. (13s) Our modern apparatus for extraction and purification of royal jelly SVORODA, J., MAKHOVA, M. & BACILEK, Y. (298) Determination of royal ielly quan-

tity and quality in honey CODOUNIS, M. (20) Special method of storing royal jelly meant for sale

MATUSZEWSKI, J., KACZOR, E. & KOLTEK, A. (67) Immuno-suppressive effect on roval ielly

ALLES, P. & ALLES, G. (5s) On the determination of physiological activity of stored royal ielly components

GEORGIEVA, E. & VASILEV, V. (12s) The results of treating patients suffering from ulcers with royal ielly

PEICHEY, L., MURDJEY, A. & DIMITROY, G. (23s) Royal jelly for patients with surgical

and urinary diseases PEICHEY, L. & DIMITROV, G. (23s) Opsonic index in patients with surgical diseases before and after their treatment with royal jelly

## **Propolis 638.178.B**

Peschansky, A. N. (23s) Propolis concentrate

MATEL, I., CIZMARIK, J. & STRAKA, R. (18s) Some aspects of the use of propolis in human medicine

CIZMARIK, J. & MATEL, I. (20) Studies on chemical composition of propolis. Isolation and identification of 3-methoxy 4 oxy-cinnamic acid

PROPRAVKO, S. A. (80) Chemical composition and biological activity of some frac-

tions of propolis BOGDAN, I. (9s) Use of propolis in different affections of the breathing apparatus

KARIMOVA, Z. H. & RODIONOVA, E. N. (50-51) Use of propolis for the treatment of pulmonary and bronchial tuberculosis

ROOKS, V. P. (27s-28s) The use of propolis for the treatment of non-specific endobronchitis TANASIENKO, Y. S. (30s) The use of propolis for the prophylaxis and treatment of

chronic non-specific pneumonia and bronchial asthma in children Bolshakova, V. F. (10s) On use of propolis in dermatology

SCHELLER, S. & SEFEROWICZ, E. (28s) The use of active fractions of propolis in the prophylaxis and in the treatment of pyodermias

POCHINKOVA. P., POPNIKOLOV, P. & DONCHEV, S. (26s) Our experience and observations of medical properties of propolis applied for middle-ear disease

PALMBAKHA, S. E. (22s) The study of antimicrobic effect of propolis on microflora of gastrointestinal tract NIKOLOV, S., TODOROV, V., GEORGIEVA, E. & DRENOVSKY, S. (19s-20s) The use of

propolis for ulcer control KIVALKINA, V. P. & BUDARKOVA, E. L. (54-55) Adjuvant effect of propolis used for

immunization in combination with tetanus anatoxin KIVALKINA, V. P., BALALYKINA, A. I. & PIONTKOVSKY, V. I. (15s-16s) Plasmocytic

reaction of white rats immunized with the combination of antigen and propolis TODOROV, V., KONEV, S., KAPITANOVA, E., DRENOVSKY, S., VASILEV, V. & PETROV, M.

(30) Treatment of hardly-closed wounds with propolis

ATYASOV, N. I., GUSEVA, M. P. & KURPIYANOV, V. A. (7s-8s) Treatment of granulating wounds by propolis ointments

#### Pollen 638.178.2

SELLIANAKIS, G. (90) Pollen (production and economy)

CONSTANTINI, F. & ALBORE, G. R. D' (20) Pollen as additive in the chicken diet GEORGIEVA, E. & VASILEV, V. (12s) Therapeutic and prophylactic effects of pollen load in treatments of bleeding ulcers

#### Bee Venom 638.178.8

OKHOTSKY, B. A. (21s-22s) Bee stinging treatment in combination with helio- and thalassotherapy

SOLODUKHO, I. G. & CHEREPNOVA, N. A. (29s) Production of medical preparations of bee venom

ORLOV, B. N. (20s) Basic cholinolytic properties of bee venom

ARTEMOV, N. M., KORNEVA, N. V., ORLOV, B. N. (9) Physiological analysis of reflectory effect of bee venom

RAZVOZOVA, E. P. (27s) The use of Apifor in surgical clinics

KHARCHENKO, N. S. & POCHEPTSOV, V. G. (14s) Experimental and clinical study of bee venom preparation—Toxanin

GAVRIKOV, B. N. (11s) Use of bee venom preparation "Apitox" for some human diseases treatment

Bredikhin, G. M. (10s) By-effect of apitherapy

ORLOV, B. N. & CHEREPNOV, V. L. (21s) The study of bee venom effect of nervous tissue with electron microscope

Bobrova, N. A. & Smirnov, N. V. (8s) Application of bee venom preparations to cure diseases of peripheral nervous system

BOLDINA, N. A. (9s-10s) Use of bee venom to cure some diseases of nervous system

KARNEEV, F. D. (14s-15s) Bee venom treatment of auditory nerve neuritis Benton, A. W. (13) The physiological responses of normal human beings to honey-

bee venom ARTOMASOVA, A. V. & TITOVA, S. M. (7s) Allergy to bees

SHKENDEROV, S. (28s) Fractionation of bee venom and study of its components as stimulators of cortex adrenal glands and anaphylactogenesis

MIRON, A. V. & KORABLEV, M. V. (18s-19s) Dimedrol—an antagonist of bee venom (Apisarthron)

POBEREZHSKAYA, T. I. & KIREEVA, V. F. (25s-26s) Secretory-evacuation function of the stomach and gall secretion in dogs poisoned with bee venom

POCHINKOVA, P., ZLATEVA, M. & ZHIVKOVA, Z. (26s) On some changes in muscular and bony tissues as the results of local application of bee venom administered by ultrasonic-phonophoresis method

- Guseva, M. P. (12s-13s) Use of bee venom in the treatment of polyarthritis and some other diseases in out-patients
- PRIKHODKO, V. I. (26s-27s) Preliminary results of the use of bee venom as an antirelapse remedy for lumbosacral radiculitis
- KAPLOON, N. A., KOMAROVA, E. T., EREMENKO, B. I. & SOLUDUKHO, I. G. (13s-14s)
  Electrophoretic application of bee venom (Apifor preparation) for treatments
  of sacrolumbar radiculitis and arthritic deformation
- PHILLIPS, S. J., VICK, J. A. & BROOKS, R. B. (77–78) The effect of Russian and American bee venoms on cardiovascular hemodynamics
- CHERNOV, Y. N. (18-19) The effect of bee venom (Apisarthron) and its combinations with royal jelly (Apilac) on the development and outcome of experimental myocarditis
- LIASHENKO, M. S. (16s-17s) The experience of the treatment of inflammatory gynaecological diseases with the bee venom preparation Apisarthron
- ARTEMOV, N. M. & KONKOVA, L. G. (5s-6s) Bee venom influencing the sex system function of female rats
- Ovcharov, R., Shkenderov, S. & Mihallova, S. (75) Pharmacobiochemical studies on anti-inflammatory effect of Apamine peptide
- OMAROV, S. M. (20s) The influence of bee venom on blood coagulation
- Vick, J. A., Mehlman, B., Brooks, R., Phillips, S. J. & Shipman, W. (108) Effect of bee venom and melittin on plasma cortisol in the unanaesthetized monkey
- PIGULEVSKY, S. V. (24s-25s) The use of protozoa and other animals with transparent body for toxicological research
- Shkenderov, S. (29s) The study of enzymic and other biochemical indices of diagnostic importance in blood and liver of rats, injected with long-term big doses of bee venom
- MIKHALCHENKO, I. A. (19s) The influence of Hymenoptera venom on *Paramecium* caudatum

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- Lisý, E. (63) Pollination of agricultural crops and beekeeping economy
- Kurennoi, N. M. (61) Effect of bee stocking rates on yield and quality of coriander seeds
- ALIEV, T. A. (5–6) Use of honeybees for mustard pollination
- KATSAROV, G. (51–52) Determination of economic effect of sunflower pollination by bees on the basis of experiments conducted in Dobroudgea district
- Pritsch, G. (81) Research on honeybees' role in pollination of broad bean (Vicia faba)
- WAWRYN, T. (109) Use of bee colonies for increasing red clover (*Trifolium pratense* L.) seed yield
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- BLAGOVESHCHENSKAYA, N. N. (14) Comparative pollinating activity of wild solitary bees and honeybees
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- ADLAKHA, R. L. & SHARMA, O. P. (3-4) Interspecific introduction of queens (Apis mellifera queens into A. indica nuclei)

- KAPIL, R. P. & BRAR, H. S. (49) Foraging behaviour of *Apis florea* Fab. in relation to *Brassica campestris* var. *toria*
- TIRGARI, S. (98) On biology and behavioural characteristic of small Indian bee (Apis florea, F.) in Iran

  KARII, R. P. & KIMAR, S. (50). Nesting behaviour of Braunanis parvula (Smith).
- KAPIL, R. P. & KUMAR, S. (50) Nesting behaviour of *Braunapis parvula* (Smith) (Hymenoptera: Anthophoridae)
- GROZDANIC, S. S. (41–42) Common species of *Halictus* genus and their significance for studies on phylogentic origin of a bee colony