

medicinal properties/propolis/1973-83

Kovalik, P. V. **The use of propolis in the treatment of patients with chronic fungal sinusitis.** *Vestnik Otorinolaringologii* (1979) (No. 6) 60-62 [Ru, en, Medical Inst., Ternopol'e, USSR.

Altogether 12 patients (35-62 yrs old) with chronic sinusitis, caused by *Candida albicans*, were investigated. In in vitro tests the fungus was sensitive to propolis in 8 cases, weakly sensitive in 2 and resistant in 2. The patients were treated with an alcohol-oil emulsion of propolis. The emulsion (2-4 ml) was introduced into the sinuses after irrigation with isotonic saline (every day or every second day). After 1-2 treatments with propolis there was an improvement in the condition of patients. After 5-8 treatments, clinical recovery occurred in 9 and improvement in 3 patients. Recovery occurred after 10-17 days.

medicinal properties/propolis/1983-98

Cuba, Estacion Experimental Apicola. **4th Symposium on propolis and 3rd on apitherapy, 21-24 August 1996, Instituto de Farmacia y Alimentos, La Habana, Cuba.** [IV Simposio de propoleos y III de Apiterapia, 21-24 Agosto 1996, Instituto de Farmacia y Alimentos, La Habana, Cuba.]. Ciudad de La Habana, Cuba; Estacion Experimental Apicola. (1996) 72 pp. [Es, Bdo]

Most (48) of these summaries of papers presented at this combined symposium concern the composition, antimicrobial properties and medical and therapeutic properties of propolis. Properties and uses of honey, pollen, royal jelly and honey bee venom in the treatment of various conditions, are described in a further 21 summaries. There is also a list of participants in the symposium.

International Symposium on Apitherapy, 6th, Portoroz. **Abstracts of scientific papers, 6th International Symposium on Apitherapy, September 22-25, 1988, Portoroz, Yugoslavia.** Bucharest, Romania, Apimondia Publishing House. (1988) iv + 60 pp. [En, Bd]

Of the 61 abstracts of papers presented at the symposium, 17 deal specifically with propolis, 9 with honey, 5 with pollen, 4 with honeybee venom, and 3 with royal jelly. The other 23 abstracts deal with more than one hive product, or brand-name products without details of composition, or apitherapy in general. D.G. Lowe.

International Symposium on Apitherapy, 5th, Cracow. **Abstracts, Vth International Symposium on Apitherapy, Cracow, 23-26 May 1985.** Cracow, Poland ; Apimondia. (1985) 74 pp. [En, Ba]

Of the 59 abstracts of papers presented at the symposium, 32 deal specifically with propolis, 10 with bee-collected pollen, 6 with honey, and 4 with venom. The other abstracts deal with more than one hive product, or hive products in general. D.G. Lowe.

Lithuania, Ukrainian Institute of Apiculture and Lithuanian Apitherapists' Association. **Apitherapy and apiculture.** Vilnius, Lithuania; Ukrainian Institute of Apiculture and Lithuanian Apitherapists Association. (1993) 238 pp. [Ru, en, Bd]

This book contains the proceedings of a conference held in Palanga, Lithuania, in 1992. All the articles include short English summaries.

Revue Francaise d'Apiculture. **Apitherapy today.** [Aujourd'hui l'apitherapie.]. *Revue Francaise d'Apiculture* (1987) (No. 465, Supplement) 86 pp. [Fr, Bj]

This supplement to *Revue Francaise d'Apiculture* has 8 main sections: honey, pollen and royal jelly as dietetic foods; honey; pollen; propolis; royal jelly; bee venom; beeswax; associated products. Each section has 3 or 4 short articles, by various authors, describing composition, properties, analysis, uses, etc., and a number of contributions from research workers worldwide, grouped under the heading "Communications". There is also an article on the Apitherapy Commission of Apimondia. D.G. Lowe.

North American Apiotherapy Society. **Proceedings of the North American Apiotherapy Society. Volume 5.** Linthicum, MD, USA; North American Apiotherapy Society. (1982) iv + 44 pp. [En, B]

This volume consists of 12 papers by various contributors. Five are on the treatment of arthritis and other conditions with honeybee venom and other venoms, and 4 are on the composition of venoms. A short review of the biological properties of propolis is included. [Previous proceedings are described in AA 645/82; 299, 1012/83.] P. Walker.

Asis, M. **Notes on propolis and apitherapy.** [Apuntes sobre un evento de propoleo y apiterapia.]. *Noticiero Agropecuario, Cuba* (1989) (No. 12, Supplement) 2-11 [Es, Ba]

This paper, presented at a symposium on apitherapy, Varadero, 29-30 June 1989, reviews the properties and medical uses of propolis.

Centro de Informacion y Documentacion Agropecuario, Gaveta Postal 4149, Habana 4, Cuba.

Asis, M. **Propolis: the purple gold of honeybees.** [Propoleo: el oro purpura de las abejas.]. Havana, Cuba; Centro de Informacion y Documentacion Agropecuario. (1989) 255 pp. [Es, en, ru, Bd]

Chapter 1 of this book deals briefly with hive products other than propolis <dash> honey, beeswax, pollen, royal jelly and bee venom. Chapter 2 describes the composition of propolis, the collection and use of propolis by honeybees, and the harvesting, storage and use of propolis by man. Chapter 3 gives a more detailed account of the biological characteristics of propolis and deals with the quality control of propolis extracts and propolis products. Russian, Hungarian, Bulgarian and Cuban standards on propolis are set out. The final chapter describes uses of propolis in medicine, agriculture and industry. Each chapter concludes with a bibliography, and in total there are 33 pages of references.

OBD. G. Lowe.

Centro de Informacion y Documentacion Agropecuario, Calle 13, Havana 12300,

Cuba.

Ban, J., Popovic, S., and Maysinger, D. **Cytostatic effects of propolis in vitro.** *Acta Pharmaceutica Jugoslavica* (1983) **33** (3/4) 245-255 [En, sh, Ba]

The cytostatic activity of alcohol extracts of propolis was examined in vitro on human cervical carcinoma (HeLa) cells. After 10 days' incubation, a concentration of 10<micro>g extract/ml caused 50% inhibition of colony-forming ability (IC<sub>(50)>). The effect of individual flavonoids (galangin, quercetin, rhamnetin) was also tested. Treatment for 24 h with propolis of exponentially growing and plateau-phase cell cultures gave threshold-exponential dose-response curves with a similar IC<sub>(50)> of 105<micro>g/ml. Author.

Central Inst. Tumours and Allied Diseases, Zagreb, Yugoslavia.

Bankova, V., Popov, S., Bocari, G., and Haxhialushi, E. **Phenolics in Albanian poplar buds and their relationship to propolis.** *Fitoterapia* (1994) **65** (4) 326-330 [En, 19 ref.] Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria.

Phenolic compounds in bud exudates of *Populus nigra* and *P. canadensis* <dash> collected in July from trees near Tirana <dash> was investigated, and compared with two samples of Albanian propolis, and with Bulgarian *P. nigra* bud exudates. Although the phenolic composition of poplar buds growing in Albania was different from that of propolis, the concentrations and structures of exudate phenols suggests that they may find useful application in medicinal products.

Bianchi, E. M. **The preparation of the tincture, the soft extract, the ointment, the soap and other propolis-based products.** *Apiacta* (1995) **30** (2; 3/4) 56-62;121-127 [En, Bj] Centro de Investigaciones Apícolas, Universidad Nacional de Santiago del Estero, Avda. Moreno (S) 577, 4200 Santiago del Estero, Argentina. OBP. Walker.

The subjects covered include: origin, collection and use of propolis by bees, collection (by man) from the hive and storage, chemical composition, biological properties, medical uses and formulations, recipes for making propolis-based products, quality tests and possible contraindications (e.g. allergy).

Boyanova, V., Drumeva, D., and Radoslavova, Z. **Active-prophylactic preparations for the oral cavity containing propolis extract.** *Med.-Biol. Inf.* (1989) (No. 6) 22-25 [Ru, Nauchno-Issled. Khim.-Farm. Inst., Sofia, Bulgaria.

Toothpastes, gels (for massage) and rinses are described.

Cheng, P. C. and Wong, G. **Honey bee propolis: prospects in medicine.** *Bee World* (1996) **77** (1) 8-15 [En, Bj] Department of Entomology, University of California, Davis, CA 95616, USA.

OBD. G. Lowe.

The antibacterial, antifungal, antiviral and anti-tumour effects of propolis and its components, especially flavonoids and caffeic acid phenethyl ester (CAPE), are reviewed, with 22 references. It is emphasized that the composition of propolis varies depending on the season and the botanical sources from which

the bees have collected resins, and that only by identifying individual components and their mode of action can progress be made in the use of propolis in scientific medicine.

Christova, V. M. **A propolis-enriched wax therapy against inflammatory diseases of the articular-muscular system. Proceedings of the XXXth International Congress of Apiculture, Nagoya, 1985.** Nagoya, Japan; Apimondia. (1986) 429-431 [En, Bd]

Patients suffering from various lesions and traumatic disorders of the joints, or spondylarthritic impairment of the spinal column (36 patients in all), were treated by covering the affected part with hot dressings of wax enriched with about 10% propolis. Applications took about 25<minus>30 minutes, and a complete treatment consisted of 10<minus>12 applications. The treatments were very effective (intensity of symptoms reduced by 50<minus>100%) in 20 cases, effective (intensity of symptoms reduced by up to 50%) in 14 cases, and ineffective in 2 cases. D.G. Lowe.

Donadieu, Y. **Propolis in natural therapeutics.** Paris, France; Maloine Editeur S.A. (1983) (Ed. 2) 56 pp. ISBN 2-224-00910-0 [En, B]

Ebel, G. **Health from the bee pharmacy. Bee products <dash> their natural 'vital power' and curative effect.** [Gesundheit aus der Bienen-Apotheke: Bienenprodukte <dash> ihre naturliche Vitalkraft und Heilwirkung.]. Geneva, Switzerland; Ariston Verlag. (1994) (Ed. 2) 222 pp. ISBN 3-7205-1796-9 [De, Bd]

OBP. Walker.

This book gives much practical information on the use of hive products in apitherapy, including detailed instructions for making and using various formulations. An earlier edition was published in 1988 as part of a book entitled Bienensegen. The book includes a short reading list, a list of useful addresses and a subject index.

Fierro Morales, W. and Lopez Garbarino, J. **Clinical evaluation of a new hypoallergic formula of propolis in dressings. Bee products: properties, applications, and apitherapy [edited by Mizrahi, A.; Lensky, Y.].** New York, USA; Plenum Publishing Corporation. (1997) 101-105 ISBN 0-306-45502-1 [En, Bd]
Department of Surgery - Outpatient Service, Hospital 'G. Saint Bois', Montevideo, Uruguay.

OBP. Walker.

Patients with burns, clean wounds, infected wounds or abscesses/ulcers were treated with a hydrosoluble cream containing (A) 2% propolis or (B) 8% propolis. B caused local intolerance in 18% of patients by day 9, whereas A caused symptoms in only 1.8% of patients by day 16. Burns and wounds treated with A healed in 11 days on average, septic wounds in 17.5 days, 67% of ulcers in 36 days. The methods of treatment are described.

Gafar, M., Dumitriu, H., Dumitriu, S., and Guti, L. **Apiphytotherapeutic original**

- preparations in the treatment of chronic marginal parodontopathies. A clinical and microbiological study.** [Preparate originale apifitoterapeutice in tratamentul parodontopatiilor marginale cronice. Studiu clinic si microbiologic.]. *Stomatologie* (1989) **36** (2) 91-97 [Ro, en\ ru, Ba]
- Products based on propolis are reported to have shown antimicrobial and antiinflammatory activity when used in the treatment of pathological conditions of the mouth.
- OBD. G. Lowe.
Disciplina de Odontologie si Parodontologie, 70754 Bucharest, Romania.
- Gafar, M., Sacalus, A., David, E., and David, N. **Treatment of simple pulp gangrene with the apitherapy product "Propolis"**. [Tratamentul gangrenei pulpare simple cu produsul apiterapic "Propolis"]. *Stomatologie* (1986) **33** (2) 115-117 [Ro, en\ ru, Ba]
- An alcoholic tincture of propolis, with a concentration of 50%, was effective as an antiseptic in the treatment of pulp gangrene. Author.
Clinica Odontologie & Parodontologie, Institutul de Medicina si Farmacie, 70756 Bucharest, Romania.
- Giurcaneanu, F., Crisan, J., Esanu, V., Cioca, V., and Cajal, N. **Treatment of herpes infections of the skin and zona zoster with Nivcrisol-D.** *Revue Roumaine de Medecine, Virologie* (1988) **39** (1) 21-24 [Fr, en,
The title product, containing propolis, had a significant therapeutic effect against recurrent herpes and zona zoster.
Hopital Colentina, Service de Dermatologie, 89 Sos. Stefan cel Marc., 72204 Bucharest, Romania.
- Grochowski, J., Bilinska, M., and Stankiewicz, D. **The therapeutic effect of 3% propolis ointment on mice of DBA/2H breed suffering from skin burns subsequently infected with Pseudomonas aeruginosa. Proceedings of the XXXth International Congress of Apiculture, Nagoya, 1985.** Nagoya, Japan; Apimondia. (1986) 439-440 [En, Bd]
- Experiments were carried out on a group of 64 mice with burns that had been artificially infected with P. aeruginosa. After 24 h, mice from the experimental group (A) were treated daily with 3% propolis ointment containing soya oil, dehydrated butter, fresh dehydrated pork fat and beeswax. Mice in the control group (B) were left untreated. In A, the burns took 7<minus>13 days to heal completely in 85% of the mice, and up to 16 days in 11% of mice. In B, the burns healed in 14<minus>18 days in 84% of the mice; 4 mice died within that period. Other experiments showed that the ointment medium was as important as the propolis; vaseline and lanolin ointments containing propolis were much less effective than the ointment used in A.D.G. Lowe.
- Hamanaka, H. and Harada, M. **Propolis food compositions containing polyols and polyol fatty acid esters, and their manufacture.** *Japanese Patent* (1990) (JP 02<thin>245<thin>159) 10 pp. [Ja, Nippon Proparisu K. K., Japan.
The compositions of propolis-containing health foods, which are claimed

to alleviate the symptoms of hangovers, asthma and allergy, are described.

Ionita, R. and 7 others. **Experimentation with apiarian preparations for the direct and indirect capping of dental pulp.** *Revista de Chirurgie Oncologie ORL Radiologie Oftalmologie Stomatologie, Stomatologie* (1990) **37** (1) 19-30 [Ro, en\ru,

Studies were carried out using a paste made from an alcoholic solution of propolis and zinc oxide. This was used on 150 teeth with indirect capping of deep cavities, and 50 teeth with direct capping. The results obtained showed that the paste with propolis exerted effects similar to those of zinc eugenate. Morphological study of the indirect capping showed that secondary dentine developed shortly after the application of the paste, and that it was followed by the development of pulpites and the sclerous transformation of the pulp. In teeth with direct capping a protective film developed at the opening of the dental chamber. With time the pulpal wound underwent cicatrization by a process of fibrosis and there was a trend to remineralization. No areas of pulpal degeneration were found in the rest of the pulpal tissue, and this suggests that the paste is more histophilic than pastes based on calcium hydroxide, with which an area of necrosis occurred at the opening of the dental chamber, and calcium and fibrous degeneration occurred in the coronal pulp.

OB Author.

Clinica Odontologie Parodontologie, Romania.

Isakbaev, M. **Combined treatment of patients with atrophic rhinopharyngolaryngitis.** *Vestnik Otorinolaringologii* (1986) (No. 3) 78-79 [Ru, Bb]

With aloe extract, iron preparations, vitamin A and propolis.

Jeanne, F. **Propolis. Source, characteristics and composition [technical leaflet 3 5 10].** [La propolis. Origine, nature et composition [fiche technique 3 5 10].]. *Bulletin Technique Apicole* (1996) **23** (1) 39-42 [Fr, Bj] Centre Apicole, F-61370 Echauffour, France.

Kaal, J. **Natural medicine from honey bees (apitherapy).** Amsterdam, Netherlands; Kaal's Printing House. (1991) 93 pp. ISBN 90-9004522-8 [En, Bd]

This book was first published in the Netherlands under the title Apitherapie (1987). It contains separate chapters on propolis, bee venom, royal jelly, pollen and honey, giving for each details of their composition and applications. Each chapter also has summaries of selected research investigations on that particular substance. There is also a chapter on Apilarnil and Apilarnilprop, which are patented products of Romanian origin. Apilarnil is produced from drone honey bee larvae and the food provided for them, processed, lyophilized and made into tablets. When supplemented with propolis powder the product is called Apilarnilprop. There is a list of publications cited, a bibliography, a general subject index and indexes of chemical names, pathogens, and authors.

OBD. G. Lowe.

Konig, B. **News about propolis: caffeic acid derivatives responsible for anti-cancer activity and allergy.** [Neues uber Propolis: Antitumorwirkung und Allergie durch Kaffeesaurederivate.]. *Heil Kunst* (1988) **101** (10) 453-456 [De, Bc]

This paper reviews recent publications reporting the effects of certain caffeic acid esters and other compounds related to caffeic acid that are present in propolis: anti-cancer activity, anti-viral activity, endocrinological effects, allergy. It is postulated that, after its uptake by the body, the phenolic part of the caffeoylic compound is oxidized to a quinone structure, which then forms covalent bonds with amino acids from either structural or functional proteins. It is the resulting compound that exhibits the biochemical effects. P. Walker.

Wehlstr. 4a, D-3100 Celle, German Federal Republic.

Konig, B. and Dustmann, J. H. **Tree resins, bees and anti-viral chemotherapy.** [Baumharze, Bienen und antivirale Chemotherapie.]. *Naturwissenschaftliche Rundschau* (1988) **41** (2) 43-53 [De, Bc]

Apart from a short discussion on fossil tree resins (amber) and their evolutionary relationships with insects, the main subject of this review, with 49 references, is propolis. The accent is largely on recent studies by the authors on the antiviral properties of propolis, but the following aspects are also covered: the use of tree resins by humans; botanical origins and medicinal properties of propolis; chemical composition of propolis; caffeoylics as natural antiviral compounds; propolis and honeybee pathology.

OBSee also AA 330/88.\0BD. G. Lowe.

Niedersächsisches Landesinstitut für Bienenforschung, Wehlstr. 4a, 3100 Celle, German Federal Republic.

Konig, B. and Dustmann, J. H. **Tree resins, bees, and antiviral chemotherapy.** *Animal Research and Development* (1989) **29** 21-42 [En, Ba]

English version of previous item.

Korsun, V. P. **The use of propolis in treating trophic ulcers.** *Vestnik Dermatologii i Venerologii* (1983) (No. 11) 46-48 [Ru, Bb]

Sixty-four patients with tibial skin ulcers, aged from 23 to 98 years, were treated using propolis that had been dissolved in an equal part of Calendula tincture for 2<minus>3 days, homogenized and mixed with vaseline (20 g propolis per 100 g base). The ointment was applied daily to the ulcerated area, which was also treated on the periphery with antibiotic ointments. The treatment lasted for 4<minus>12 weeks, and was combined with oral medication aimed at an improvement of blood vessel condition and oxidative processes in the tissues, and with administration of herbal infusions and royal jelly. At the end of treatment, 19 of the 64 treated patients exhibited no clinical signs of the condition, 19 an improved condition, and 9 no change or a worsening of the condition. P. Millar.

Kafedra kozhnykh i venericheskikh boleznei, Minskii Meditsinskii Institut, Minsk, Byelorussian SSR, USSR.

Krol, W., Scheller, S., Czuba, Z., Matsuno, T., Zydowicz, G., Shani, J., and Mos, M.

Inhibition of neutrophils' chemiluminescence by ethanol extract of propolis (EEP) and its phenolic components. *Journal of Ethnopharmacology* (1996) **55** (1) 19-25 [En, Bc] Department of Microbiology and Immunology, Silesian Academy of Medicine, Zabrze-Rokitnica, Poland.

The ethanol extract of propolis (EEP), has been known for centuries for a variety of beneficial traditional medicinal properties, including an important antiinflammatory activity. Nineteen phenolic compounds isolated from propolis collected from the beehive of the Silesian Academy of Medicine were tested for antiinflammatory activity by evaluating their inhibitory effects on luminol-enhanced chemiluminescence resulting from free radicals generated by guineapig neutrophils that had been stimulated by phorbol myristate acetate. Caffeic-acid-phenylethyl-ester abolished the chemiluminescence completely at a concentration of 10 μ M, while 3 flavonols (galangin, kaempferol and kaempferid) diminished this chemiluminescence by 73-93% at the same concentration.

Marcucci, M. C. **Propolis: chemical composition, biological properties and therapeutic activity.** *Apidologie* (1995) **26** (2) 83-99 [En, fr\de, Bj] Biological Chemistry Laboratory, Chemical Institute of Universidade Estadual de Campinas, CP 6154, cep 13081-970, Campinas, SP, Brazil.

OBAuthor.

In this review, with 209 references, the following topics are covered: plant sources and chemical composition of propolis; chemical constituents that may be relevant to its biological and therapeutic activity; cytotoxic activity and antimicrobial and pharmacological properties; components which cause allergy and are responsible for anticancer activity, e.g. caffeic acid derivatives; therapeutic efficacy of propolis in treating diseases caused by microorganisms; some recent concepts about propolis and its use in medicine.

Matsuda, S. **Propolis \rightarrow health care food.** *Honeybee Science* (1994) **15** (4) 145-154 [Ja, en, Bj] Hayashibare Biochemical Laboratories Ltd., 1-2-3- Shimoishii, Okayama 700, Japan.

OBAuthor.

In some countries, and especially in Eastern Europe, propolis has been used in folk medicine for centuries. A review of the literature shows that the following have been attributed to propolis: antibacterial, anti-tumour, anti-inflammatory, analgesic and immunostimulating activities. The composition of propolis is discussed; many of the plant-derived compounds it contains have pharmacological properties, and their effects on humans vary from one person to another. Various side-effects of propolis which have been recorded are discussed. Propolis may, therefore, not be ideal for medical use and it may be preferable to develop its use in health foods.

Matsuno, T. **Isolation and characterization of the tumoricidal substances from Brazilian propolis.** *Honeybee Science* (1992) **13** (2) 49-54 [Ja, en, Bj] National Institute of Health, 4-7-1 Gakuen, Musashimurayama-shi, Tokyo 208, Japan.

OBAuthor.

A method is described for extracting some constituents of propolis as

micelles with fatty acid esters. When the extract is taken by mouth or, preferably, applied to tumours, symptoms are reduced. In in vitro tests of extracts of Brazilian propolis on human hepatocellular carcinoma, KB and HeLa cell lines, cytotoxicity was shown by quercetin, caffeic acid phenyl ester and other (unidentified) constituents of propolis. One active component was isolated and identified as a new clerodane diterpenoid. It arrested tumour cells at the S phase and killed them within 3 days. However, the compound showed little cytotoxic effect on human diploid cells.

Millet-Clerc, J., Michel, D., Simeray, J., and Chaumont, J. P. **Preliminary study of the antifungal properties of propolis compared with some commercial products.** [Etude preliminaire des proprietes fongistatiques de la propolis comparees a celles de quelques produits commerciaux.]. *Plantes Medicinales et Phytotherapie* (1987) **21** (1) 3-7 [Fr, en, Ba]

Propolis and 9 anti-fungal drugs were tested on 4 fungi that cause infections in humans. Propolis was as effective as (or more effective than) some of the other preparations against 3 of the fungi, and in some tests its activity was enhanced in the presence of propylene glycol. Propolis + propylene glycol gave better results against *Scopulariopsis brevicaulis* than any of the drugs tested. P. Walker.

Lab. Pharmacie Galenique, Fac. Medecine & Pharmacie, Place St.-Jacques, 25030 Besancon Cedex, France.

Millet-Clerc, J., Simeray, J., Michel, D., and Chaumont, J. P. **Antifungal properties of propolis against fungi causing mycoses.** [Proprietes antifongiques de la propolis vis a vis de quelques champignons responsables de mycoses.]. *Bulletin de la Societe Francaise de Mycologie Medicale* (1986) **15** (2) 517-521 [Fr, en, Bc]

Propolis was tested on samples from various sources of 6 fungi that cause infections in humans. Propolis exhibited antifungal properties against all the fungi, but for the same fungus there were considerable differences between the results for different propolis samples. P. Walker.

Lab. Pharmacie Galenique, Fac. Medecine & Pharmacie, Place St.-Jacques, 25030 Besancon Cedex, France.

Minieri, L., Nizza, A., and Perucci, G. **Propolis: origin, properties and use.** [La propoli: origine, proprieta, utilizzazione.]. *Acta Medica Veterinaria* (1979) **25** 11-37 [It, en, B]

Review.

Mizrahi, A. and Lensky, Y. Editors. **Bee products: properties, applications, and apitherapy.** New York, USA; Plenum Publishing Corporation. (1997) xi + 269 pp. ISBN 0-306-45502-1 [En, Bd]

OBIndividual chapters are abstracted separately in this issue of Apicultural Abstracts.\0BD. G. Lowe.

This book contains 31 chapters based on selected contributions presented at a conference held in Tel-Aviv, Israel, on 26-30 May 1996. They cover a wide variety of aspects of hive products (honey, beeswax, pollen, propolis, royal jelly,

- venom) including production, composition, quality, uses in medicine, uses in food processing and analytical methods. The book, which includes a subject index, will be of interest to beekeepers, entomologists, physicians and food producers.
- Nardi, U. **Apitherapy**. [Apiterapia.]. Rome, Italy; Aporie Edizioni. (1992) 191 pp. ISBN 88-85192-11-4 [It, Bd]
 OBD. G. Lowe.
 The uses of honey, bee-collected pollen, propolis, royal jelly, beeswax and honey bee venom in the treatment of a variety of diseases and disorders are described.
- Neumann, D., Gotze, G., and Binus, W. **Clinical study of the testing of the inhibition of plaque and gingivitis by propolis**. [Klinische Studie zur Untersuchung der Plaque- und Gingivitis-Hemmung durch Propolis.]. *Stomatologie der DDR* (1986) **36** (12) 677-681 [De, en\ ru, Ba]
 Sixty students were divided into groups to test the effect of propolis on the development of plaque and gingivitis. The results suggest that a propolis preparation can be a useful subsidiary treatment in oral hygiene. P. Walker.
 Martin-Luther-Univ. Halle-Wittenberg, Grosse Steinstr. 19, Halle 4020, German Democratic Republic.
- Nowottnick, C. **Healing power from the honeybee colony: propolis**. [Heilkraft aus dem Bienenvolk: propolis.]. Graz, Austria; Leopold Stocker Verlag. (1987) 80 pp. ISBN 3-7020-0526-9 [De, Bd]
 Deals briefly with collection by bees, composition and harvesting, but is mainly about propolis preparations for treating various disorders.
- Nowottnick, K. **Propolis: production, use, recipes**. [Propolis: gewinnung <dash> anwendung <dash> rezepte.]. Graz, Austria; Leopold Stocker Verlag. (1993) 100 pp. ISBN 3-7020-0653-2 [De, Bd]
 OBP. Walker.
 The introductory sections of this book include information on the history of propolis, the collection of propolis by bees and its composition. Part 3 describes several methods for producing propolis. Part 4 discusses its use in the treatment of various disorders and Part 5 gives formulas. The book is illustrated with clear colour photographs and line drawings, and there is a bibliography of 57 items.
- Okonenko, L. B. **Propolis and its use in medicine**. *Klinicheskaya Meditsina* (1985) **63** (10) 20-24 [Ru,
- Olariu, T., Palos, E., and Olariu, A. I. **Treatment of giardiasis [Giardia infection] with propolis tincture. Proceedings of the XXXIst International Congress of Apiculture, Warsaw, Poland, August 19-25, 1987**. Bucharest, Romania; Apimondia Publishing House. (1989) 470-473 [En, Bd]
- Popescu, H., Giurgea, R., and Polinicencu, C. **Standardized propolis extract and**

Candiflor medicines. [Extractul de propolis standardizat si medicamentele Candiflor.]. Bucharest, Romania; Centrala Industriala de Medicamente, Cosmetice, Coloranti si Lacuri. (1985) 226 pp. [Ro, B]

This book covers the following aspects: composition and characteristics of raw propolis; pharmacological and therapeutic effects of propolis; technology and processing of propolis to obtain a standardized extract (EPS); analytical controls; laboratory toxicity tests; biochemical experiments with EPS on healthy and diseased animals; Candiflor creams, ointments, sprays and other medicines; clinical cases treated with Candiflor preparations. There is a bibliography of 188 references. D.G. Lowe.

Popovici, C., Palos, E., Popescu, F., and Mateescu, C. **Apitherapeutical treatment used in the acute inflammations of the pharynx and the larynx.** *Apiacta* (1985) **20** (4) 109-112 [En, B]

Several preparations of propolis were used in the treatment of over 200 patients with acute pharyngitis, acute tonsillitis or acute laryngitis. In each treatment group 10% of patients were treated by normal methods. Good results are reported. P. Walker.

Potchinkova, P. A. **A case of postradial interproctitis treated with propolis.** **Proceedings of the XXXth International Congress of Apiculture, Nagoya, 1985.** Nagoya, Japan; Apimondia. (1986) 471 [En, B]

Rectal haemorrhage was halted by treatment with propolis extract.

Przybylski, J. and Scheller, S. **Early results in treatment of Legg-Calve-Perthes illness with intra-articular injections of aqueous solutions of propolis.** [Fruhzeitige Ergebnisse der Behandlung der Legg-Calve-Perthes Krankheit mittels Gelenkinjektion von wassrigem Extrakt von Propolis.]. *Zeitschrift fur Orthopadie* (1985) **123** (2) 163-167 [De, en, B]

Injections of an aqueous solution of propolis were used in the treatment of 22 patients with this hip joint disease caused by aseptic necrosis of the thigh bone. A further 32 patients with the same condition were given different forms of routine treatment. The results confirmed the efficacy of propolis in treating this sort of condition. Author.

Inst. Microbiology, PL-41 808, Zabrze-Rokitnica, Poland.

Rimbaud, E. and Chaffer, M. **The use of propolis in traumatic wounds.** [El propoleos en la clinica de politraumatizados.]. *Veterinaria Argentina* (1987) **4** (33) 272-275 [Es, en, B]

Traumatic wounds with loss of tissue in 15 dogs and 12 cats were treated successfully with propolis in various formulations. Author.

Docente Clinica Semiologica, Fac. Veterinaria, Univ. Republica Oriental del Uruguay, Lasplacas 1550, Montevideo, Uruguay.

Sabatier, S., Amiot, M.-J., Aubert, S., Tacchini, M., and Gonnet, M. **Importance of flavonoids in sunflower honeys.** [Importance des flavonoides dans les miels de tournesol.]. *Bulletin Technique Apicole* (1988) **15** (3) 171-178 [Fr, B]

Large quantities of sunflower (*Helianthus annuus*) honey are produced in France, and its high content of flavonoids makes it a useful material for the food and pharmaceutical industries. Phenolic compounds were extracted from 44 samples of French sunflower honey with ethyl acetate and HPLC was used to analyse the extracts for flavonoids. The compounds identified were mainly flavanones with characteristics close to those of naringenin. They are comparable to certain substances with medicinal properties that have been isolated from propolis. Some flavones, flavonols and isoflavones were also detected. Author.

Inst. Technique de l'Apiculture, "La Guyonnerie" , 91440 Bures-sur-Yvette, France.

Sala-Llinares, A. **Beekeeping and phytotherapy: use of beekeeping products in various phytotherapeutic formations.** [Apicultura y fitoterapia. Utilizacion de los productos apicolos en diversas formulas fitoterapeuticas.]. *Vida Apicola* (1995) (No. 70) 12-16 [Es, B] Departamento de Productos Naturales, Biologia Vegetale Sanitaria y Edafologia, Universidad de Barcelona, Barcelona, Spain. OBP. Walker.

Some unifloral honeys are thought to have the same therapeutic or medicinal properties as the plants from which they come. Examples are the honeys from citrus trees, heather, eucalyptus, rosemary and holm oak. Several commercial formulations are given which include 10-50% of honey. Therapeutic properties of pollen, royal jelly and propolis are also discussed, and formulations are given.

Scheller, S., Aleksandrowicz, J., Nikodemowicz, E., Czuba, Z. P., Krol, W., Zydowicz, G., Malinowska, B., and Kieloch-Szkoda, M. **Trials of immunoregulation in patients with chronic bronchitis.** [Proby immunoregulacji w przewlek<|>ym zapaleniu oskrzeli.]. *Immunologia Polska* (1989) **14** (3/4) 304-305 [Pl, Bc]

A total of 260 steel workers suffering from bronchitis were treated for 24 days by various methods including local and systemic regulation of the immune system and local treatment with an ethanolic extract of propolis (EEP) in a physiological salt solution. The best results were obtained in patients treated with EEP inhalations, together with propolis tablets and applications of dolomite.

OBAuthor.

Dept. Microbiology, School of Medicine, 41-808 Zabrze-Rokitnica, Poland.

OB04901404 Scheller, S., Krol, W., Zydowicz, G., Czuba, Z. P., Shani, J., Straszecka, E., Malinowska, B., Aleksandrowicz, J., Nikodemowicz, E., and Nicer, A. **Ethanol extract of propolis (EEP) and Dolomite potentiates the immunostimulatory effect of Biostymine and Levamisole in chronic bronchitis.** *Pharmacology (Life Science Advances)* (1995) **14** 5-10 [En, Bc] Department of Microbiology and Immunology, Silesian School of Medicine, Zabrze-Rokitnica, Poland.

OBP. Walker.

Groups of bronchitic patients were treated with EEP and Dolomite (calcium + magnesium) and some were given an immunostimulant. After 30 days' treatment it was found that EEP + Dolomite alone did not improve the immune

condition of patients. However, when combined with biostymine or levamisole, some immunological parameters were significantly improved.

Scheller, S., Owczarek, S., Krol, W., Malinowska, B., Nikodemowicz, E., and Aleksandrowicz, J. **Immunization trials in two cases of alveolitis fibroticans with decreasing conductivity of the immune system: effect of ethanol extract of propolis (EEP), Esberitox N and a calcium-magnesium preparation.** [Immunisierungsversuche bei zwei Fallen von Alveolitis fibroticans bei abnehmender Leistungsfahigkeit des Immunsystems unter Anwendung von Propolis-Athanolextrakt (EEP), Esberitox N und eines Calcium-Magnesium-Preparates (Dolomit).]. *Heilkunst* (1989) **102** (6) 249-255 [De, Bc]

A strong immune deficiency was found in 2 patients with alveolitis fibroticans. Treatment with a combination of the 3 title substances resulted in good improvements in the state of the immune system and the clinical condition of both patients.

OBP. Walker.

Dept. Microbiology, Silesian School of Medicine, 41-808 Zabrze-Rokitnica, Poland.

Sharma, H. C. and Singh, O. P. **Medicinal properties of some lesser known but important bee products. Proceedings of the Second International Conference on Apiculture in Tropical Climates, New Delhi, February 29<minus>March 4, 1980.** (1983) 694-702 [En, B]

Describes medicinal properties of honeybee venom, beeswax, propolis and pollen.

Shi, J. S. **Summary of 148 cases of using propolis remedy to treat psoriasis.** *Journal of Bee* (1991) (No. 11-12) 16-17 [Ch, Bj]

Tikhonov, O. I. **Optimization of the technology of biologically active fractions of propolis.** *Farmatsevtichnii Zhurnal* (1985) (No. 1) 45-47 [Uk,

For use in medicinal preparations.

Toth, G. **Propolis: medicine or fraud?** *American Bee Journal* (1985) **125** (5) 337-338 [En, B]

Tothne and Papay, V. **Propolis and its medicinal properties.** [A propoliszrol es gyogyhatasairol.]. *Egeszsegugyi Munka* (1987) **34** (11) 325-329 [Hu, Ba]

The biological activities of samples of Hungarian propolis were examined and were found to include antiinflammatory, antibacterial, antifungal, and local anaesthetic effects. Propolis inhibited growth of resistant Gram-positive and Gram-negative bacteria and fungi. The use of Hungarian propolis in producing pharmaceutical products and cosmetics is discussed. Author.

Vachy, R., Amoros, M., and Sauvager, F. **Synergistic virucidal composition containing a phenol compound and propolis useful against lipidic capsid viruses, especially herpes viruses.** *International Patent Application* (1991) (WO 91 13

626) 29 pp. [En,

Yamamoto, T. **Present state of basic studies on propolis in Japan. Bee products: properties, applications, and apitherapy [edited by Mizrahi, A.; Lensky, Y.]**. New York, USA; Plenum Publishing Corporation. (1997) 107-120 ISBN 0-306-45502-1 [En, Bd] Nihon Natural Foods Co. Ltd., 6-26-12 Nishishinjuku, Shinjuku-ku, Tokyo, Japan.

OBP. Walker.

Published research on propolis is surveyed under the two headings: antimicrobial activity, immune activating effect and cytotoxic effect.

OB04901053 Zamora, M. M. and Mezquita, P. C. **Propolis: toxicity, uses and availability**. [El propoleo: toxicidad, empleo y disponibilidad.]. *Ciencia y Abejas* (1996/1997) **5;6** (19;20;21;22) 14-16;15-16;14-16;17-20 [Es, Bj] Instituto de Investigaciones para la Industria Alimenticia, La Habana, Cuba.

OBD. G. Lowe.

This literature review, with 71 references, covers the following aspects: antimicrobial properties, allergies, therapeutic properties, uses in medicine and veterinary medicine, uses in cosmetics and pharmaceuticals, availability and cost.

Zangerl, A. **Propolis and its healing properties**. [Propolis und ihre Heilwirkung.]. Tirol, Austria; Adalbert Zangerl. (1986) (Ed. 2) 56 pp. [De, Bd]

Zommer-Urbanska, S., Gniazdowski, R., and Bojarowicz, H. **Working out the technology of propolis unguentum and its application in vaso-motor catarrh treatment. Proceedings of the XXXIst International Congress of Apiculture, Warsaw, Poland, August 19-25, 1987**. Bucharest, Romania; Apimondia Publishing House. (1989) 488-492 [En, Bd]

Zylka, L. **Propolis, a powerful product of the honeybee colony**. [Die Propolis, wundersame Kraft aus dem Bienenvolk.]. Bad Segeberg, German Federal Republic; Verlag Landesverband Schleswig-Holsteinischer und Hamburger Imker e. V. (1987) 22 pp. [De, Bb]

This booklet describes the medicinal properties of propolis. It includes the author's experiences of the effective action of propolis or 'propolis honey' on various disorders, and gives methods for making propolis preparations. [Reprinted from *Neue Bienenzucht* (1986) 13: 285-287, 313-318; (1987) 14: 48-51, 88-92, 144-148.] P. Walker.

medicinal properties/propolis/1999-

1193/99 Burdock, G. A. Review of the biological properties and toxicity of bee propolis (propolis). *Food and Chemical Toxicology* (1998) 36 347-363 [En, Bc] Burdock and Associates, 662 Beachland Boulevard, Suit B, Vero Beach, FL 32963, USA.

Propolis is a multifunctional material used by bees in the construction and maintenance of their hives. Use of propolis by humans has a long history, predated only by the discovery of honey. Use of products containing propolis have resulted in extensive dermal contact and it is now increasingly being used as a dietary supplement. Unlike many 'natural' remedies, there is substantive data on the biological activity and toxicity of propolis, indicating it may have many antibiotic, antifungal, antiviral and antitumour properties, among other attributes. Although reports of allergic reactions are not uncommon, propolis is relatively non-toxic, with a no-effect level (NOEL) in a 90-mouse study of 1400 mg/kg body weight/day.

[Author]

909/99 Kimoto, T.; Kurimoto, M. [Antioxidant effects and prevention of carcinogenesis by oral administration of Brazilian propolis and Artepillin C]. Honeybee Science (1999) 20 (2) 67-74 [Ja, en, Bj] 67-74 Fujisaki Inst., Hayashubara Biochem. Labs Inc., 675-1 Fujisaki, Okayama, 702-8006 Japan.

In male mice, oral administration of propolis plus a propolis extract (Artepillin C) effectively suppressed renal lipid peroxidation. Repeated injection of FeNTA (10 mg Fe/kg/day, 16 times in 8 weeks) caused a marked necrosis in the proximal renal tubes and in the onset of renal cell and lung carcinoma after 12 months. The antioxidant effect of propolis plus Artepillin C protected the tumours from carcinogenesis.

[Author]

913/99L Matescu, C. [Propolis as a therapeutic agent]. Honeybee Science (1999) 20 (2) 51-61 [Ja, en, Bj] Medical Center of Apitherapy, Inst. of Apicultural Research & Dept., Bucharest, Romania.

920/99 Sato, T.; Miyataka, H. [*Helicobacter pylori* as a prime cause of stomach cancer and effect of propolis on the bacteria]. Honeybee Science (1999) 20 (2) 75-84 [Ja, en, Bj] Faculty of Pharmaceutical Science, Tokushima Bunri Univ., Yamashiro-cho, Tokushima, 770-8514 Japan.

In trials, propolis was more effective than H2 blockers in preventing or suppressing experimental ulcers caused by stress. Propolis had a stronger inhibitory action than the known suppressors of gastric acid secretion. Propolis also inhibited the enzymatic activity of urease.

[P Walker]

924/99 Tihonov, A. I.; Yarnyh, T. G.; Chernyh V P; Zupanets, I. A.; Tyhonova, S. A. [The theory and practice of production of propolis medicinal preparations]. Kharkov, Ukraine; Osnova (1998) 383 pp. ISBN 5-7768-0577-5 [Ru, Bd]

The five chapters of this book on propolis deal with the following subjects: (1). therapeutic properties; (2) modern processing techniques; (3) the biologically active components of propolis; (4) pharmacologically active components and their toxicological properties; medicinal preparations. The last chapter is divided into commercial preparations, those undergoing clinical tests and others not yet tested, and also cosmetics.

[P Walker]