

## APİTERAPİ UYGULAMALARINDA TİBBİ UYGULAMA HATALARI



Meral KEKEÇOĞLU<sup>1</sup>

Bora BÜKEN<sup>2</sup>

Ali Timuçin ATAYOĞLU<sup>3</sup>

### GİRİŞ

Antik çağlardan beri bal, propolis, polen, arı sütı ve arı zehri gibi arıcılık ürünleri, güçlü iyileştirici özellikleri ve yüksek biyoaktif içeriği nedeniyle halk hekimliğinde en yaygın kullanılan doğal ürünler arasında yer almıştır (Crane, 1990). Günümüze degen bal başta olmak üzere polen, propolis, bal mumu ve arı süti çeşitli hastalıklara karşı çare olarak görülmüş ve hatta tedavi edici özellikleri de yıllar içinde keşfedilmiştir. Bu ürünler üzerinde yapılan binlerce araştırmanın sonuçları arı ürünlerinin insanoğlu için kıymetini ortaya koymaktadır.

Eski Mısırlılar ve Sümerlere kadar uzanan tarih boyunca sağlık ve beslenme amacıyla kullanılan ve kutsal kitaplarda övülerek tavsiye edilen arı ürünlerine son yıllarda bilimsel araştırmalarda da yoğun bir şekilde yer verilmektedir. Tüm bu çalışmalar paralelinde bal arısı ve ürünleri ile tedavi anlamına gelen apiterapi konusuna ilgi her geçen gün artmaktadır.

<sup>1</sup> Doç. Dr., Düzce Üniversitesi Fen Edebiyat Fakültesi Biyoloji Bölümü, meralkekecoglu@duzce.edu.tr, ORCID iD: 0000-0002-2564-8343

<sup>2</sup> Prof. Dr., Düzce Üniversitesi Tip Fakültesi Adli Tip AD., bukenbora@gmail.com, ORCID iD: 0000-0003-2768-5946

<sup>3</sup> Doç. Dr., İstanbul Medipol Üniversitesi, Uluslararası Tip Fakültesi ve Sağlık Bilimleri Enstitüsü, Geleneksel ve Tamamlayıcı Tip AD., atatayoglu@medipol.edu.tr, ORCID iD: 0000-0003-4568-4234



daha sonra kullanıldığından salınarak zararlı olabilir. Dolayısıyla bu ürünlerin antibiyotik kalıntıları içermeyen, kalite standartları bilinen, doğal ürünler olması gerekmektedir. Organik Arıcılık'ta olduğu gibi Apiterapi Arıcılığı da ayrı bir başlık olarak ele alınmalı hem Sağlık Bakanlığı hem de Tarım ve Orman Bakanlığı tarafından belirlenen kriterler çerçevesinde denetlemeler yürürlüğe sokulmalı ve bu denetlemelerden geçen ürünler tıbbi amaçla kullanılmalıdır (Atayoğlu ve Atayoğlu 2015). Apiterapiye uygun üretim yapılmasına ilişkin tebliğ yayınlanmalıdır. Hekimlerin tamamlayıcı olarak orijini ve üretim prosedürü bilinmeyen ürünler önermemesi, içeriği standardize edilmiş markalı ürünleri önermesi gerekmektedir.

Bahsi geçen örnekler, sağlık profesyonellerinin ve hastaların arı ürünleriyle yapılan tedavilere yaklaşırken dikkat etmeleri gereken bazı potansiyel riskleri ve malpraktis durumlarını göstermektedir. Herhangi bir tedaviyi uygulamadan önce, bilimsel temellere dayalı ve güvenilir tıbbi rehberlik almak her zaman önemlidir. Sağlık profesyonellerinin apiterapi yaklaşımı, potansiyel faydalari ve riskleri ile ilgili sağlam bir anlayışa dayanmalı ve kanita dayalı bakım sağlama taahhüdüne sahip olmalıdır.

## KAYNAKLAR

1. Abdelhafiz, AT., Muhamad, JA. Midcycle pericoital intravaginal bee honey and royal jelly for male factorinfertility. International Journal of Gynecology & Obstetrics, 101 (2): 146-149. (2008)
2. Abdulla, CO., Ayubi, A., Zulfiquer, F., Santhanam, G., Ahmed, M.A.S., Deeb, J. Infant botulism following honey ingestion. BMJ Case Rep. 3–5. (2012) doi:10.1136/bcr.11.2011.5153.
3. Abdulrhman M., Elbarbary NS., Ahmed Amin, D., Saeid Ebrahim, R. Honey and a mixture of honey, beeswax, and olive oil-propolis extract in treatment of chemotherapy-induced oral mucositis: a randomized controlled pilot study. Pediatr Hematol Oncol. Apr;29(3):285-92. (2012) doi: 10.3109/08880018.2012.669026. PMID: 22475306.
4. Abdulsalam, MA., Ebrahim, BE., Abdulsalam, AJ. Immune thrombocytopenia after bee venom therapy: a case report. BMC Complement Altern Med. 16, 107. (2016)
5. Abelsoul N. H. "Herbal medicine in ancient Egypt" Journal of Medicinal Plants Rese Vol. 4(2), pp. 082-086, 18 January. (2010)
6. Acikgoz, Z., Yucel, B. Using facilities of apilarnil (bee drone larvae) in poultry nutrition. Works of the Faculty of Agriculture and food Sciences, University of Sarajevo, 61: 12-15. (2016)
7. Aguiar, R., Fátima, CD., Ana, M., Borja, B., et all. Anaphylaxis caused by honey: a case report. Asia Pacific Allergy, 7, 48-50. (2017)
8. Ahn, YJ., Shin, JS., Lee, J., et al. Safety of essential bee venom pharmacopuncture as assessed in a randomized controlled double-blind trial. J Ethnopharmacol. 194, 774–780. (2016).
9. Abd El-Wahed, AA., Farag, MA., Eraqi, WA., Mersal, GAM., Zhao, C., Khalifa, SAM. Unravelling the beehive air volatiles profile as analysed via solid-phase microextraction (SPME) and chemometrics, Journal of King Saud University – Science, Volume 33, Issue 5. (2021) <https://doi.org/10.1016/j.jksus.2021.101449>.



10. Alekseichuk, I., Turi, Z., Amador de Lara, G., Antal, A., & Paulus, W. Spatial Working Memory in Humans Depends on Theta and High Gamma Synchronization in the Prefrontal Cortex. *Current Biology*, 26(12), 1513–1521. (2016) doi:10.1016/j.cub.2016.04.035
11. Aliyev, F., Turkoglu, C., Celiker, C., Firatlı, İ., Alici, G., Uzunhasan, I. Chronic mad honey intoxication syndrome: a new form of an old disease? *Europace* 11, 954-6. (2009).
12. Altan, Ö., Yücel, B., Açıkgöz, Z., Seremet, Ç., Kösoğlu, M., Turgan, N., Özgönül, AM. Apilarnil reduces fear and advances sexual development in male broilers but has no effect on growth. *British poultry science*, 54(3): 355-361. (2013)
13. Altunatmaz, S., Aksu, F. Arı poleninin Mikrobiyolojik Kalitesinin Belirlenmesi. *Erciyes Univ Vet Fak.* 13(3), 182-7. (2016)
14. Andritou, CV., Andritou, V., Zonda, GI., Foia, L., Carlan, M., Costuleanu, M. Experimental treatment involving apitherapy in hereditary hemolytic anemia. *Romanian Journal of Medical and Dental Education*, 1: 34-37 (2012)
15. Anonim, 1928. Tababet ve Şuabati San'atlarının Tarzı İcrasına Dair Kanun Kanun Numarası : 1219 Kabul Tarihi : 11/4/1928. (Değişik: 14.6.1989 – 3575). <https://www.mevzuat.gov.tr/mevzuatmetin/1.3.1219.pdf>.
16. Anonim 2020. TGK Arı Ürünleri Tebliği, 2020/7.
17. Anonim, 2023, <https://www.dailymotion.com/video/x6k2824>.
18. Anonim, USA. Beeswax. Affirmation of GRAS status as a direct human food ingredient. USA. Laws and Statutes. 1978;14643-14644 Federal Register 43 (68).
19. Anonim. Geleneksel ve Tamamlayıcı Tıp Uygulamaları Yönetmeliği, 27 Ekim 2014. Sayı: 29158. (2014) Erişim. Tarihi 13.06.2023
20. Atayoğlu, AT., Atayoğlu, AG. Dünyada ve Türkiye'de apiterapi (Akçicek, E., Yücel, B.; eds Arı Ürünleri ve Sağlık (Apiterapi), İzmir: Sidas Medya s. 24-8. (2015)
21. Atayoğlu, AT. Apiterapiye Genel Bakış. *J Biotechnol and Strategic Health Res.* 3, 61-66. (2019)
22. Baijal, S., Srinivasan, N. Theta activity and meditative states: spectral changes during concentrative meditation. *Cognitive processing*. 11, 31-38. (2010)
23. Bakour, M., Laaroussi, H., Ousaaid, D., El Ghouizi, A., Es-Safi, I., Mechchate, H., Lyoussi, B. Bee bread as a promising source of bioactive molecules and functional properties: an up-to-date review. *Antibiotics*. 11(2):203. (2022)
24. Balıkçı, MB. Tıbbi Uygulama Hatası İddialarında Ölümle Sonuçlanan Ve Sonuçlanmayan Olguların Karşılaştırılması (Tıp Bilimleri Anabilim Dalı Doktora Tezi). . T.C.İstanbul Üniversitesi-Cerrahpaşa Adli Tıp Ve Adli Bilimler Enstitüsü.(2019)
25. Bankova, V., Popova, M., Trusheva, B. Plant sources of propolis: An update from a chemist's point of view. *Nat Prod Commun.* 1(11), 1934578X0600101118. (2006)
26. Barganska, Z., Lebioda, M., Namieśnik, J. Honey bees and their products: Bioindicators of environmental contamination. *Crit Rev Environ Sci Technol.* 46(3), 235–248. (2016) doi:10.1080/10643389.2015.1078220.
27. Basista, KM., Filipek, B. Allergy to propolis in Polish beekeepers. *Postep Derm Alergol.* 6: 440-445. (2012)
28. Başgül, A. Deli bal zehirlenmesi. *Yoğun Bakım Dergisi*. 3, 33-6. (2003)
29. Bauer, L., Kohlisch, A., Hirschwehr, R., et al. Foodallergytohoney: pollen or bee products? Characterization of allergenic proteins in honeybymeans of immunoblotting. *J Allergy Clin Immunol.* 97, 65–73. (1996)
30. Berene, I., Daberte, I., Siksan, S. Investigation of beebread and development of its dosage forms. *Medicinos*. 21(1):16–22. (2015)
31. Bernal, J., Garrido-Bailón, E., Del Nozal, MJ., González-Porto, AV., Martín-Hernández, R., Diego, JC., Higes, M. Overview of Pesticide Residues in Stored Pollen and Their Potential



- Effect on Bee Colony (*Apis mellifera*) Losses in Spain. *J Econ Entomol.* 103(6), 1964–1971. (2011). doi:10.1603/ec10235.
32. Bobiş, O., Dezmine Daniel, S., Moise, AR. Honey and Diabetes: The Importance of Natural Simple Sugars in Diet for Preventing and Treating Different Type of Diabetes. *Oxid Med Cell Longev.* 4757893. (2018) doi:10.1155/2018/4757893.
  33. Bogdanov, S., Kılchenmann, V., Imdorf, A. Acaricide residues in some bee products. *J Apic Res.* 37(2), 57-67. (1998)
  34. Bogdanov, S. Beeswax: History, Uses, Trade. *Bee Product Science*, chapter 2. (2016)
  35. Bolatovna, KS., Rustenov, A., Eleuqalieva, N., Omirzak, T., Akhanov, UK. Improving reproductive qualities of pigs using the drone brood homogenate. *Biol Med (Aligarh).* 7(2): BM-091-15. (2015)
  36. Buken, B. 2023 Yaş Tayini. Adli Bilimler ve Kriminalistik Ansiklopedisi Cilt 1. (Vural, O., Hancı, İH.;eds.) Nisan 2023 ISBN: ? s: 1375-1406.).
  37. Bullock, RJ., Rohan, A., Straatmans, JA. Fatal royal jelly-induced asthma. *Med J Aust.* 160(1), 44. (1994)
  38. Buzsaki, G., Draguhn, A. Neuronal oscillations in cortical networks. *Science,* 304(5679), 1926-1929. (2004)
  39. Buzsáki, G., Anastassiou, CA., Koch, C. The origin of extracellular fields and currents—EEG, ECoG, LFP and spikes. *Nature reviews neuroscience,* 13(6), 407-420. (2012)
  40. Buzsáki, G., Watson, BO. Brain rhythms and neural syntax: implications for efficient coding of cognitive content and neuropsychiatric disease. *Dialogues in clinical neuroscience.* (2022)
  41. Büken, B. Türk Hukuk Sistemi, Getat Uygulamaları ve Malpraktis, Çözüm Önerileri. Uluslararası 1. Kocaeli Geleneksel ve Tamamlayıcı Tıp Kongresi. Tam Bildiri Kitapçığı. 11-13 Haziran 2021. Kocaeli. 183-194. (2021)
  42. Callejo, A., Armentia, A., Lombardero, M., Asensio, T. Propolis, a newbee-relatedallergen. *Allergy.* 56(6), 579. (2001)
  43. Can, İÖ., Özkar, E., Can, M. Yargıtayda Karara Bağlanan Tibbi Uygulama Hatası Dosyalarının Değerlendirilmesi. *Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi.* 25 (2), S: 69 – 76. (2011)
  44. Celsus, C. *De medicina.* London: Heinemann, 1935
  45. Chae, WY., Kim, SH., Lee, YH., Lee, BH., Lee, JH., Woo, JJ. Acute lung injury after bee sting acupuncture. *Allergy Asthma Respir Dis.* 3, 151–154. (2015)
  46. Chen, Y. Apiculture in China(English Eddition). CHINASCIBOOK BJ. China. (1993)
  47. Chen, J., Lariviere, WR. The nociceptive and anti-nociceptive effects of bee venom injection and therapy: A double-edged sword. *Prog Neurobiol.* 92, 151–183. (2014) doi:10.1016/j.pneurobio.2010.06.006.
  48. Chen, SY., Zhou, P., Qin, Y. Treatment of Rheumatoid Arthritis by Bee-venom Acupuncture. *Zhen ci yan jiu = Acupunct res.* 43(4), 251–254. (2018) doi:10.13702/j.1000-0607.170506.
  49. Cheng, YMRX. Arrhythmia by bee sting acupuncture. *J Clin Acupunct Moxibustion.* 20, 54. (2004)
  50. Cherniack, P., Govorushko, S. To bee or not to bee: The potential efficacy and safety of bee venom acupuncture in humans. *Toxicon.* 154, 74-78. (2018)
  51. Chmielewska, H., Szczēsna, T. HPLC study of chemical composition of honeybee *Apis mellifera* L venom *J Apic Sci.* 48 2 103 108. (2004)
  52. Cho, E., Lee, JD., Cho, SH. Systemic contact dermatitis from propolis ingestion. *Ann Dermatol.* 23(1), 85-8. (2011)
  53. Cho, SY., Peck, KR., Kim, J., et al. Mycobacterium chelonae infections associated with bee venom acupuncture. *Clin Infect Dis.* 58, e110–113. (2014)



54. Cohen, HA., Varsano, I., Kahan, E., Sarrell, EM., Uziel, Y. Effectiveness of an herbal preparation containing echinacea, propolis, and vitamin C in preventing respiratory tract infections in children: a randomized, double-blind, placebo-controlled, multicenter study. *Archives of pediatrics & adolescent medicine*, 158(3), 217-221. (2004)
55. Constantin, D. Rezultate obtinute in tratamentul cu apilaril potente a tulburarilor de dinamică sexuală. *Romanian Apiculture*. 10: 21. (1989)
56. Conti, ME., Borte, F. Honeybees and their product as potential bioindicators of heavy metals contamination. *Environ Monit Assess*. 69, 267. (2001)
57. Crane, E. Composition of honey. (Crane, E.; eds.), *Honey, a comprehensive survey*, London William Heinemann, pp. 439-488, 1975.
58. Crane, E. Bees and Beekeeping: Science, Practice and World Resources. s. 614 Heinemann Newnes, Oxford, UK. (1990)
59. Culpeper, N. *Culpeper's Complete Herbal: A Book of Natural Remedies of Ancient Ills* (The Wordswoth Collection Reference Library) (The Wordswoth Collectie Reference Library). NTC/Contemporary Publishing Company. (1995) ISBN 1-85326-345-1.
60. Czuchraj, TM. Bee as much in this word. In *Beekeeping, Apitherapy and Phytotherapy in Human Hands*; Pchelovod: Simferopol, Russia, pp. 47-57. (In Russian). (2012)
61. Czyżewska, U., Konończuk, J., Teul, J., Drągowski, P., Pawlak Morka, R., Surażyński, A., Miltyk, W. Verification of Chemical Composition of Commercially Available Propolis Extracts by Gas Chromatography Mass Spectrometry Analysis. *J Med Food*. 18 5584 591. (2015)
62. Çaprazlı, T., Kekeçoglu, M. Factors affecting the composition and production amount of honey bee venom. *U Bee J*. 21, 132-145. (2021)
63. Çetin, G. *Tıbbi Malpraktis*. İçinde: Çetin G, Yorulmaz C, editörler. *Yeni Yasalar Çerçevesinde Hekimlerin Hukuki ve Cezai Sorumluluğu, Tıbbi Malpraktis ve Adli Raporların Düzenlenmesi*. İstanbul: İ.Ü. Cerrahpaşa Tip Fakültesi Sürekli Tip Eğitimi Etkinlikleri Sempozyum Dizisi No:48, 2006;31-42.
64. Dündar, E., Kalkan Yıldırım, H. Propolisin çeşitliliğine etki eden faktörler. *Arıcılık Araştırma Dergisi*. 10(2), 61-66. (2018).
65. Derebaşı E ve Canbakal E. Ari zehrinin kimyasal yapısı ve tıbbi çalışmalarda kullanımı,” *Arıcılık Araştırma Dergisi*, 1(2), 32-34, (2009).
66. Eichenlaub, JB., Van Rijn, E., Gaskell, MG., Lewis, PA., Maby, E., Malinowski, JE., Blagrove, M. Incorporation of recent waking-life experiences in dreams correlates with frontal theta activity in REM sleep. *Social Cognitive and Affective Neuroscience*. 13(6), 637-647. (2018)
67. Elistratova, TV., Khomyakova, IV., Tolbina, GA. Composition for preventing and healing compromised bone and a method of making same. United States Patent Application Publication. US 20160339063 A1. (2016)
68. Elnagar, SA. Royal jelly counteracts bucks “summer infertility”. *Anim Reprod Sci*, 121: 174-180. (2010)
69. Ersan, A. *Uygulamada Tıbbi Hatalar ve Algoloji Hemşireliği*. Medikolegal Düzlem Tıpta Uygulama Hataları. (Bilge, Y., Geçim, İE.; Eds.), Baskı Evi Matbaa Promosyon ve Reklam Hizm. San. Tic. Ltd. Şti. ISBN: 978-605-89639-2-4 s: 54-56) (Yarg 4. HD, 1973/2684, 1973/2978, 13.3.1973).
70. Farias, JHC., Reis, AS., Araujo, MAR., Araujo, MRAM., Assuncao, AKM. Farias, JC., Fialho, EMS., Silva, LA., Costa, GC., Guerra, RNM., Ribeiro, MNS. and Nascimento, FRF. Effects of Stingless Bee Propolis on Experimental Asthma. *Evidence Based Complementary and Alternative Medicine*. 5: 951478. (2014)
71. Fernandez-Travieso, JC., Rodriguez-Perez, I., Ruenes-Domech, C., Illnait-Ferrer, J., Fernandez-Dorta, L., Mendoza-Castano, S. Benefits of the Therapy With Abexol in Patients With Non-Alcoholic Fatty Liver Disease. *Gastroenterology Res*. 13(2):73-80. doi: 10.14740/gr1273. (2020) PMID: 32362966; PMCID: PMC7188363.



72. Folić, M., Nešić, V., & Arsović, N. Efficiency of Propolis and N-acetylcisteine on Reduction in Symptom Severity of Respiratory Infection in Children with Adenoid Hypertrophy. *Journal of Pharmacy and Pharmacology*, 8, 91-98. (2020)
73. Fuiano, N., Incorvaia, C., Riario-Sforza, CG., Casino, G. Anaphylaxis to honey in pollinosis to mugwort: a case report. *European annals of allergy and clinical immunology*, 38(10): 364-65. (2006)
74. Genon, S., Reid, A., Langner, R., Amunts, K., & Eickhoff, S. B. How to Characterize the Function of a Brain Region. *Trends in Cognitive Sciences*. 22(4), 350–364. (2018) doi:10.1016/j.tics.2018.01.010 .
75. Ghanbari, E., Khazaei, MR., Khazaei, M., Nejati, V. Royal Jelly Promotes Ovarian Follicles Growth and Increases Steroid Hormones in Immature Rats, *Int J Fertil Steril*, 11(4):263-269. (2018)
76. Guardia, T., Identifying the chemical compounds of beehive air, 1st International Beehive Air Therapy Conference, 2022-Germany. (2022)
77. Gunduz, A., Turedi, S., Uzun, H., Topbas, M. Mad honey poisoning. *Am J Emerg Med* 24, 595-8. (2006)
78. Gunduz, A., Meriçé, ES., Baydin, A., Topbaş, M., Uzun, H., Turedi, S., et al. Does mad honey poisoning require hospital admission? *Am J Emerg Med* 27, 424-7. (2009)
79. Halaç, G., Zengin, Z., Sezer, GM. Honey poisoning case with stroke-like symptoms, *Turk J Neurol.* 20(1), 13–15. (2014) doi:10.4274/Tnd.32448.
80. Hancı, İH. Hekimin tazminat sorumluluğu. İçinde; Malpraktis, Tıbbi girişimler nedeniyle hekimin ceza ve tazminat sorumluluğu. Seçkin Yayıncılık San. ve Tic AŞ. s: 113-119. (2002) ISBN: 975-347-483 0 .
81. Hancı, VS., Bilir, N., Kırtacı, S., Akız, S., Yurtlu Özkoçak, I. Zonguldak bölgesinde deli bal zehirlenmesi: 72 olgunun analizi. *Türk Anest Rean Der.* 38: 278-84. (2010)
82. Harrington, MO., Ashton, JE., Ngo, HVV., Cairney, SA. Phase-locked auditory stimulation of theta oscillations during rapid eye movement sleep. *Sleep*. 44(4), zsaa 227. (2021)
83. Hassan, AA. Effect of royal jelly on sexual efficiency in adult male rats, *Iraq J Vet Sci*, 23: 155-160. (2009)
84. Hay, KD., Greig, DE. Propolis allergy: A cause of oral mucositis with ulceration. *Oral Surgery, Oral Medicine, Oral Pathol.* 70(5), 584–586. (1990) doi:10.1016/0030-4220(90)90403-F
85. Hepburn, HR., Pirk, CWW., Duangphakde, O. Honeybee nests. Springer-Verlag, Berlin. (2016)
86. Hider, RC. Honeybee venom: A rich source of pharmacologically active peptides. *Endeavour* 12(2), 60–65. (1988)
87. Hsu, CY., Chiang, WC., Weng, TI., Chen, WJ., Yuan, A. Laryngeal edema and anaphalactic shock after topical propolis use for acute pharyngitis. *Am J Emerg Med.* 22(5), 432–433. (2004) doi:10.1016/j.ajem.2004.06.007.
88. Huda, E., Tarek, E., Abd El-Wahab, nadia z D. Management of the greater wax moth galleria mellonella with neem azal-t/s, in the laboratory and under semi-field conditions, *J Apic Sci.* 60(2), 69-76. (2016)
89. Huh, JE., Baek, YH., Lee, MH., Choi, DY., Park, DS., Lee, JD. Bee venom inhibits tumor angiogenesis and metastasis by inhibiting tyrosine phosphorylation of VEGFR-2 in LLC-tumor-bearing mice. *Cancer Letters*, 292(1), 98–110. (2010) doi:10.1016/j.canlet.2009.11.013.
90. Iliescu, VN. Preparation based on medicinal plants, bee product, apilarnil and pollen. *Romanian Apicola*.1: 8. (1993)
91. Illnait, J., Rodríguez, I., Mendoza, S., Fernández, Y., Mas, R., Miranda, M., Piñera, J., Fernández, JC., Mesa, M., Fernández, L., Carbajal, D., Gámez, R. Effects of D-002, a mixture of high molecular weight beeswax alcohols, on patients with nonalcoholic fatty liver disease.



- Korean J Intern Med. Jul;28(4):439-48. (2013) doi: 10.3904/kjim.2013.28.4.439. Epub 2013 Jul 1. PMID: 23864802; PMCID: PMC3712152.
92. Isidorov, VA., Isidorova, AG., Szczepaniak, L., Czyżewska, U. Gas chromatographic mass spectrometric investigation of the chemical composition of bee bread Food Chemistry, 115 3 1056 1063. (2009)
93. Isidorov, VA., Bakier, S., Grzech, I. Gas chromatographic mass spectrometric investigation of volatile and extractable compounds of crude royal jelly J Chromat. 885 886 109 116. (2012)
94. Isidorov, VA., Bakier, S., Stocki, M., GC-MS investigation of the chemical composition of honeybee drone and queen larva homogenate, J. Apic. Sci. 60: 111-120. (2016)
95. Jang, S., Kim, KH. Clinical effectiveness and adverse events of bee venom therapy: a systematic review of randomized controlled trials. Toxins. 12(9), 1–16. (2020) doi:10.3390/toxins12090558.
96. Janos K.R., In the Series of literatura Apiterapiæ , ISSN 2560-0079 Literartura Apiterapiæ, Dr. Beck Felix Bodog Elete, Hungary, (2019)
97. Jensen, AB., Evans, J., Jonas-Levi, A., Benjamin, O., Martinez, I., Dahle, B., Roos, N., Lecocq, A., Foley K., Standard methods for Apis mellifera brood as human food, Journal of Apicultural Research, 58(2): 1-28. (2019)
98. Jung, JW., Jeon, EJ., Kim, JW., Choi, JC., Shin, JW., Kim, JY., Park, IW., Choi, BW. A fatal case of intravascular coagulation after bee sting acupuncture. Allergy Asthma Immunol Res. 4, 107–109. (2012)
99. Katayama, M., Aoki, M., Kawana, S. Case of anaphylaxis caused by ingestion of royal jelly. J Dermatol. 35, 222–224. (2008)
100. Kekeçoğlu, M. Arıcılık ve çevre. Turkiye Klinikleri J Anim Nutr&Nutr Dis-Special Topics. 2(1):42-9. (2016)
101. Kekeçoğlu, M., Keskin, M., Birinci, C., Birinci, E., Kolaylı, S. Effects of honey bee race and season on propolis composition. Journal of Agricultural Sciences. 27(2). (2021a)
102. Kekeçoglu, M., Sonmez, E., Kambur Acar, M., Karaoglu, SA. Pollen analysis, chemical composition and antibacterial activity of anatolian chestnut propolis collected from yigilca region. Biol Bull. 48(6), 721–728. (2021b)
103. Kekeçoğlu, M., Çaprazlı, T., Bir, S. Apiterapiye uygun arıcılık (Atayoğlu, AT.; ed. Apiterapi. 1. Baskı. Ankara: Türkiye Klinikleri s. 251-255. (2021c).
104. Kekeçoglu Meral, Sönmez Emine, Eroglu Nazife, Kambur Acar Merve, Çaprazlı Tugçe (2022a). Analysis of detailed chemical and bioactive components of Yigilca honeybee propolis and determination of antioxidant potential. Biology Bulletin.
105. Kekeçoglu Meral, Sönmez Emine, Dorkaç Pelin, Eroglu Nazife (2022b). Düzce-Yigilca Bölgesine Ait Farklı Propolis Örneklerinin Oral Mikroorganizmalar Üzerindeki in Vitro Antimikrobiyal Aktivitelerinin Belirlenmesi. Kahramanmaraş Sütçü İmam Üniversitesi Tarım ve Doga Dergisi, Doi:10.18016/ksutarimdoga.vi.928230.
106. Kekeçoglu Meral, Çaprazlı Tugçe, Çalışkan Emel, Ugras Serpil (2022c). Determination of Therapeutic Values of Düzce/Yigilca Honeys by Underlining Overlooked Parameters. Turkish Journal of Agriculture – Food Science and Technology, 10(2), 299-308., Doi:10.24925/turjaf.v10i2.299-308.4823.
107. Kim, CMH. The final report of the safety and toxicity of Apitox. Phase I clinical trial, FDA. (1987)
108. Kim, CMH. Apitherapy – Bee Venom Therapy, Biotherapy – History, Principles and Practice, 77-122. (2013)
109. Koca, I., Koca, AF. Poisoning by mad honey: A brief review. Food Chem Toxicol. 45(8), 1315–1318. (2007) doi:10.1016/j.fct.2007.04.006



110. Kogalniceanu, S., Lancrajan, I., Ardelean, G. Changes of the glucidic metabolism determined by the physical effort of the treatment with aslavital and apilarnil, Arad. Medical Journal, 13: 33-41. (2010)
111. Kokelj, F., Trevisan, G. Contact dermatitis from propolis. Contact Derm. 9,518. (1983)
112. Kridli, RT., Husein, MQ., Humphrey, WD. Effect of royal jelly and GnRH on the estrus synchronization and pregnancy rate in ewes using intravaginal sponges. Small Ruminant Research, 49 (1): 25-30. (2003)
113. Küçük, M., Kolaylı, S., Karaoğlu, Ş., Ulusoy, E., Baltacı, C., Candan, F. Biological activities and chemical composition of three honeys of different types from Anatolia. Food Chem. 100, 526-534. (2007)
114. Lagopoulos, J., Xu, J., Rasmussen, I., Vik, A., Malhi, G. S., Eliassen, C. F., ... & Ellingsen, Ø. Increased theta and alpha EEG activity during nondirective meditation. The journal of alternative and complementary medicine, 15(11), 1187-1192. (2009)
115. Lee, HJ., Park, IS., Lee, JI., Kim, JS. Guillain-Barre syndrome following bee venom acupuncture. Intern Med. 54, 975–978. (2015)
116. Lee, NJ., Fermo, JD., Warfarin and royal jelly interaction. Pharmacotherapy. 26(4), 583-6. (2006)
117. Leung, R., Thien, FC., Baldo, B., Czarny, D. Royal jelly-induced asthma and anaphylaxis: clinical characteristics and immunologic correlations. J Allergy Clin Immunol. 96(6 Pt 1), 1004-1007. (1995)
118. Leung, R., Ho, A., Chan, J., Lai, CKW. Royal jelly consumption and hypersensitivity in the community. Clin Exp Allergy. 27, 333 – 336. (1997)
119. Li, YJ., Lin, JL., Yang, CW., Yu, CC. Acute renal failure induced by a Brazilian variety of propolis. Am J Kidney Dis. 46(6), 125–129. (2005) doi:10.1053/j.ajkd.2005.08.028.
120. Lim, SM., Lee SH. Effectiveness of bee venom acupuncture in alleviating post-stroke shoulder pain: a systematic review and meta-analysis. J Integr Med.13:241-7. (2015)
121. Ling, CQ., Li, B., Zhang, C., Zhu, DZ., Huang, XQ., Gu, W., Li, SX. Inhibitory effect of recombinant adenovirus carrying melittin gene on hepatocellular carcinoma. Ann Oncol. 16(1), 109–115. (2005) doi:10.1093/annonc/mdi019.
122. Liu, X., Liu, C., Jiang, Y., Chen, F., Shi, C., Lai, L. Shen, L. Major royal jelly proteins accelerate onset of puberty and promote ovarian follicular development in immature female mice, Food Sci Hum Wellness. (2020)
123. Lombardi, C., Senna, GE., Gatti, B., Feligioni, M., et all. Allergic reactions to honey and royal jelly and their relationship with sensitization to compositae. Allergologia et immunopathologia, 26(6), 288-290. (1998)
124. Lopes, AA., Ferreira, TS., Nesi, RT., Lanzetti, M., Pires, KMP., Silva, AM., Borges, RM., Silva, AJ. R., Valença, SS.,Porto, LC. Antioxidant action of propolis on mouse lungs exposed to short-term cigarette smoke. Bioorganic & medicinal chemistry, 21(24), 7570-7577. (2013)
125. Manyi Loh, CE., Ndip, RN., Clarke, AM. Volatile Compounds in Honey A Review on Their Involvement in Aroma, Botanical Origin Determination and Potential Biomedical Activities Int J Mol Sci, 12 12 9514 9532. (2011)
126. Mardani. Kitabu'l Müntehab fi't-Tip. Merkezefendi Geleneksel Tıp Derneği, İstanbul. (2005)
127. Meda, A., Lamien, CE., Millongo, J., Romito, M., Nacoulma, OG. Therapeutic uses of honey and honeybee larvae in central Burkina Faso. J. Ethnopharmacol. 95: 103-107. , (2004)
128. Medeiros, KC., Figueiredo, CA., Figueiredo, TB., Freire, KR., Santos, FA., Alcantara-Neves, NM., Silva, TM., Piuvezam, MR. Anti-allergic effect of bee pollen phenolic extract and myricetin in ovalbumin-sensitized mice. Journal of ethnopharmacology, 119(1), 41–46. (2008) <https://doi.org/10.1016/j.jep.2008.05.036>



129. Mendoza, S., Noa, M., Pérez, Y., Mas, R. Preventive effect of D-002, a mixture of long-chain alcohols from beeswax, on the liver damage induced with CCl<sub>4</sub> in rats. *J Med Food.* (2007) Jun;10(2):379-83. doi: 10.1089/jmf.2006.296. PMID: 17651079.
130. Miguel, MG., Antunes, MD. Is propolis safe as an alternative medicine?. *J Pharm Bioall Sci.* 3, 479-95. (2011)
131. Mishima, S., Suziki, K., Isohama, Y. Royal jelly has estrogenic effects in vitro and in vivo. *J Ethnopharmacol;* 101: 215-220. (2005)
132. Moita, E., Sousa, C., Andrade, P. B., Fernandes, F., Pinho, B. R., Silva, L. R., & Valentão, P. Effects of Echium plantagineum L. bee pollen on basophil degranulation: relationship with metabolic profile. *Molecules* (Basel, Switzerland). 19(7), 10635–10649. (2014) <https://doi.org/10.3390/molecules190710635>.
133. Moon, DO., Park, SY., Heo, MS., Kim, KC., Park, C., Ko, WS., Kim, GY. Key regulators in bee venom-induced apoptosis are Bcl-2 and caspase-3 in human leukemic U937 cells through downregulation of ERK and Akt. *Int Immunopharmacol.* 6(12), 1796–1807. (2006)
134. Moreno, M., Giralt, E. Three valuable peptides from bee and wasp venoms for therapeutic and biotechnological use: Melittin, apamin and mastoparan. *Toxins.* 7(4), 1126–1150. (2015) doi:10.3390/toxins7041126.
135. Muraviev, DW., Kalatzinskaja, AM. Drone homogenate and hens productivity. *Viestnik Kazanskovo GAU,* 1: 132-134. (2014)
136. Nakazono, T., Sano, T., Takahashi, S., Sakurai, Y. Theta oscillation and neuronal activity in rat hippocampus are involved in temporal discrimination of time in seconds. *Frontiers in systems neuroscience,* 9, 95. (2015)
137. Nishida, M., Pearsall, J., Buckner, R. L., & Walker, M. P. REM sleep, prefrontal theta, and the consolidation of human emotional memory. *Cerebral cortex.* 19(5), 1158-1166. (2009)
138. Nyman, G., Oldberg Wagner, S., Prystupa-Chalkidis, K., Ryberg, K., Hagvall, L. Contact allergy in western sweden to propolis of four different origins. *Acta Derm Venereol.* 100(9), 1-5. (2020)
139. Onbaşılı, D., Yuvalı Çelik, G., Kahraman, S., Kanbur, M. Apiterapi ve insan sağlığı üzerine etkileri. *Erciyes Üniv Vet Fak Derg.* 16(1), 49-56. (2019).
140. Onbaşılı D., Çelik G.Y., Kahraman S. ve Kanbur M., Apiterapi ve insan sağlığı üzerine etkileri, *Erciyes Üniversitesi Veteriner Fakültesi Dergisi,* 16 (1), 49-56, (2019). doi: 10.32707/ercivet.538001.
141. Özveren, O., Erdik, B., Ozturk, MA., Kucukdurmaz, Z., Eroglu Buyukoner, E., Degertekin, M. Sweet begining, tragic end: mad honey poisoning. *Yeditepe Medical Journal,* 8(30), 789–793. (2014) doi:10.15659/yeditepemj.15.10.138.
142. Özkök, A., Erdem, B. Can food supplement produced from apilarnil be an alternative to testosterone replacement therapy. *Hacettepe Journal of Biology and Chemistry,* 4(45): 635–638. (2017) doi.org/10.15671/hjbc.2018.207.
143. Paola, F., Pantalea, DD., Gianfranco, C., Antonio, F., Angelo, V., Eustachio, N., Elisabetta, DL. Oral allergy syndrome in a child provoked by royal jelly. *Case Rep Med.* 2014;2014:941248. (2014) doi: 10.1155/2014/941248. PMID: 24799914; PMCID: PMC3988729.1
144. Park, JS., Park, YG., Jang, CH., Cho, YN., Park, JH. Severe ulnar nerve injury after bee venom acupuncture at a traditional Korean medicine clinic: a case report. *Ann Rehabil Med.* 41, 483–487. (2017)
145. Park, MH., Choi, MS., Kwak, DH., Oh, KW., Yoon, DY., Han, SB., Hong, JT. Anticancer effect of bee venom in prostate cancer cells through activation of caspase pathway via inactivation of NF-κB. *Prostate.* 71(8), 801-812. (2011) doi:10.1002/pros.21296.
146. Pişkin, Ö., Kurt, N., Hancı, V. Deli bal zehirlenmesinin neden olduğu nodal ritimli bir olgu. *Haydarpaşa Numune Tıp Derg.* 52(3), 162-166. (2012)



147. Popova, MP., Bankova, VS., Bogdanov, S., Tsvetkova, I., Naydenski, C., Marcazzan, GL., Sabatini, AG. Chemical characteristics of poplar type propolis of different geographic origin. *Apidologie.* 38(3), 306-311. (2007)
148. Potschinkova, P. *Handbuch der apireflextherapie (Behandlung und Selbsthilfe Akupunktur Akupressur und Dienenprodukten).* Sonntag Verlag, Stuttgart, Germ. (1996) ISBN 3-87758-097-1.
149. Raghuraman, H., Chattopadhyay, A. Melittin: A membrane-active peptide with diverse functions. *Biosci Rep.* 27(4–5), 189–223. (2007). doi:10.1007/s10540-006-9030-z.
150. Ramirez Cervantes, MA., Gonzalez Novelo, SA., Sauri Duch, E. Effect of the temporary thermic treatment of honey on variation of the quality of the same during storage. *Apacta.* 4, 1-8. (2000)
151. Ramos-Elorduy, J., Moreno, JMP., Prado, EE., Perez, MA., Otero, JL., de Guevara, OL. Nutritional value of edible insects from the state of Oaxaca, Mexico. *Journal of Food Composition and Analysis.* 10: 142–157. (1997)
152. Remes-Troche, JM., Téllez-Zenteno, JF., Rojas-Serrano, J., Senties-Madrid, H., Vega-Boada, F., García-Ramos, G. Thalamic and mesencephalic hemorrhages after multiple honey bee stings: a life-threatening apitherapy complication. *EurNeurol.* 49(3), 188-9. (2003)
153. Reva Z. GETAT uygulamalarına ilişkin yasal düzenlemeler, GETAT uygulayıcı ile hasta arasında ki hukuki ilişki. içinde: *Geleneksel ve Tamamlayıcı Tıp Hukuku ve Malpraktis.* s: 96-164 Eylül 2022. Holistence Publications ISBN: 978-625-8048-96-5.
154. Rosmilah, M., Shahnaz, M., Patel, G., Lock, J., Rahman, D., Masita, A., Noormalin, A. Characterization of major allergens of royal jelly *Apis mellifera*. *Trop Biomed.* 25(3), 243–251. (2008)
155. Saral, Ö., Kılıçarslan, M., Şahin, H., Yıldız, O., Dinçer, B. Evaluation of antioxidant activity of bee products of different bee races in Turkey. *J Vet Anim.* 43(4), 441–447. (2019) doi:10.3906/vet-1901-3.
156. Sawczuk R, Karpinska J, Miltyk W. What do we know and what we would like to know about drone homogenate. *J Ethnopharmacol.* 245: 111581. (2018) doi:10.1016/j.jep.2018.10.042.
157. Saygi, Ş. İlaç ve Zehirbilgisi (Ydü Shmyo Eczacılık Hizmetleri Programı). <https://docplayer.biz.tr/10747820-Ilac-ve-zehir-bilgisi-ydu-shmyo-eczacilik-hizmetleri-programi-prof-dr-sahan-saygi-2015-giris.html>). Erişim. Tarihi 23.01.2022
158. Sazirul, I., Mahmoud, KA., Sayyed, MI., Alim, B., Rahman, MDM., Mollah, AS. Study on the radiation attenuation properties of locally available bees-wax as a tissue equivalent bolus material in radiotherapy, *Radiation Physics and Chemistry.* Volume 172, 108559. (2020) ISSN 0969-806X.
159. Scarpelli, S., Bartolacci, C., D'Atri, A., Gorgoni, M., De Gennaro, L. The functional role of dreaming in emotional processes. *Frontiers in psychology.* 10, 459. (2019)
160. Senel, E., Kuyucu, M., Süslü, I. Honey and bee venom in dermatology: A novel possible alternative or complimentary therapy for psoriasis vulgaris. *Anc Sci Life.* 33(3), 190. (2014) doi:10.4103/0257-7941.144626.
161. Seres AB, Ducza E, Bathori M, Hunyadi A, Beni Z, Dekany M, Gaspar R. Raw drone milk of honeybees elicits uterotrophic effect in rats: evidence for estrogenic activity. *J. Med. Food,* 16(5): 404-409. , (2013)
162. Seres, A. Sexual Hormone Effects Of Honeybee (*Apis Mellifera*) Drone Milk In Male And Female Rats. University of Szeged, Department of Pharmacodynamics and Biopharmacy. (2014)
163. Seyhan, MF., Yilmaz, E., Timirci Kahraman, O., Saygili, N., Kisakesen, HI., Eronat, AP., Ceviz, AB., Gazioglu, SB., Yilmaz Aydogan, H., Ozturk, O. Anatolian honey is not only sweet but can also protect from breast cancer: elixir for women from artemis to present. *IUBMB Life.* 69(9), 677-688. (2017) doi:10.1002/iub.1652.



164. Shahzad, Q., Mehmood, MU., Khan, H., Husna, A., Qadeer, S., Azam, A., Naseer, Z., Ahmad, E., Safdar, M., Ahmad, M. Royal jelly supplementation in semen extender enhances post-thaw quality and fertility of Nili-Ravi buffalo bull sperm. *Animal Reproduction Science.* 167: 83-88. (2016)
165. Shoinbayeva, KB., Omirzak, T., Bigara, T., Abubakirova A., Dauylbay, A. Biologically active preparation and reproductive function of stud rams. *Asian J. Pharm.* 11:184–191. (2017)
166. Sidor, E., Džugan, M. Drone brood homogenate as natural remedy for treating health care problem: A scientific and practical approach. *Molecules.* 25(23). (2020) <https://doi.org/10.3390/molecules25235699>.
167. Silici, S., Kutluca, S. Chemical composition and antibacterial activity of propolis collected by three different races of honeybees in the same region. *J Ethnopharmacol.* 99(1), 69-73. (2005)
168. Silici, S., Ekmekcioglu, O., Eraslan, G., Demirtas, A. Antioxidative Effect of Royal Jelly in Cisplatin-induced Testes Damage. *Urology,* 74(3): 545-551. (2009)
169. Silici, S., Doğan, Z., Sahin, H., Atayoğlu, T., Yakan B. Acute effects of grayanotoxin in rhododendron honey on kidney functions in rats. *Environ Sci Pollut Res.* 23 (4), 3300–3309. (2016)
170. Silvani, S., Spettoli, E., Stacul, F., Tosti, A. Contact dermatitis in psoriasis due to propolis. *Contact Derm.* 37(1), 48-9. (1997)
171. Hill, SJ. *The Virtues of Honey*(Croft, LR.; eds) Elmwood Books. (2004)
172. Smaropoulos, E., Cremers Niels, AJ. Treating severe wounds in pediatrics with medical grade honey. *Clin Case Rep.* 8(3), 469-476. (2020) doi:10.1002/ccr3.2691.
173. Sołtys, KB. Allergy to Propolis in Beekeepers-A Literature Review. *Occup Med Health Aff.* 1: 1. (2013)
174. Sonmez, E., Kekecoglu, M., Sahin, H., Bozdeveci A., Alpay Karaoglu, Ş. An evaluation of the chemical composition and biological properties of Anatolian Royal Jelly, drone brood and queen bee larvae. *Eur Food Res Technol.* 249, 1391–1401. (2023) <https://doi.org/10.1007/s00217-023-04221-0>
175. Strant, M., Yücel, B., Topal, E., Puscasu, AM., Margaoan, R., Varadi, A. Use of Royal Jelly as Functional Food on Human and Animal Health. *Hayvansal Üretim,* 60(2), 131-144. (2019)
176. Şirvani. Kemaliyye. Merkezefendi Geleneksel Tıp Demeği, İstanbul. (2007)
177. Tabib Ibn-i Şerif. Yadigar. Sadeleştirme Orhan Sakın, Yerküre, İstanbul. (2003)
178. Tang, YY., Tang, R., Rothbart, MK., Posner, MI. Frontal theta activity and white matter plasticity following mindfulness meditation. *Current opinion in psychology.* 28, 294-297. (2019)
179. Tanzi, MG., Gabay, MP. Association between honey consumption and infant botulism. *Pharmacotherapy,* 22(11), 1479–1483. (2002) doi:10.1592/phco.22.16.1479.33696.
180. TGK, 2020/7, <https://www.mevzuat.net/demo/gidakodeksi/2020menu.aspx>
- 181 Thien, FCK., Leung, R., Baldo, BA., Weiner, JA., Plomley, R., Czarny, D. Asthma and anaphylaxis induced by royal jelly. *Clin Exp Allergy.* 26, 216-222. (1996)
182. Tu, WC., Wu, CC., Hsieh, HL., Chen, CY., Hsu, SL. Honeybee venom induces calcium-dependent but caspase-independent apoptotic cell death in human melanoma A2058 cells. *Toxicon.* 52(2), 318–329. (2008) doi: 10.1016/j.toxicon.2008.06.007.
183. Tulloch, AP. The composition of beeswax and other waxes secreted by insects *Lipids,* 5 2 247 258. (1970)
184. Tüzünler, Ö., Duymuş, E. Yargıtay Kararları Işığında Hemşirenin Hukuki Sorumluluğu. *TTB Dergisi.* (157): 408-444. (2021)
185. Uçar, M. Ari sütünün büyümeye, yaşılanma ve üreme sağlığına etkisi. *Gümüşhane univ sağlık bilim derg.* 7(1), 193-202. (2018)



186. Urcan, A., Mărghitaş, LA., Dezmirean, DS., Bobiş, O., Bonta, V., Mureşan, CI., Mărgăoan, R. Chemical composition and biological activities of bee bread-review. *Bull Univ Agric Sci Vet Med Cluj-Napoca Anim Sci Biotechnol.* 74(1):6–14. (2017)
187. Vakina, TN., Petrova, EV., Trifonov, VN., Fedorov, EN., Fedorov, AV., Andreeva, ES., Elistratova, TV., Khomykova, IV., Tolbina, GA.. Method for restoring male sex drive (libido), United States Patent Application Publication, US 9730973 B2. (2017)
188. Varol, E., Yücel, B. The effects of environmental problems on honey bees in view of sustainable life. *Mellifera.* 19(2), 23-32. (2019)
189. Vasilenko, YK., Klimova, OV., Lazaryan, DS. Biological effect of drone brood under chronic hyperlipidemia conditions, *Pharm. Chem. J.*, 36: 434-436. (2002)
190. Vazquez-Revuelta, P., Madrigal-Burgaleta, R. Death due to live bee acupuncture apitherapy. *J Investig Allergol Clin Immunol.* 28(1), 45–46. (2018) doi: 10.18176/jaci.0202.
191. Vermersch, C., Kerdraon, R., Armingaud, P., Bois, J., Bens, G., Finon, A. Sebotropic drug eruption after ingestion of bee pollen. *Ann Dermatol Venereol.* 147(2), 135-139. (2020)
192. Viuda-Martos, M., Ruiz-Navajas, Y., Fernández-López, J., Pérez-Alvarez, JA. Functional properties of honey, propolis, and royal jelly. *J. Food Sci.* 73, R117. (2008)
193. Voss, U., Holzmann, R., Hobson, A., Paulus, W., Koppehele-Gossel, J., Klimke, A., & Nitsche, M. A. Induction of self awareness in dreams through frontal low current stimulation of gamma activity. *Nature neuroscience.* (6), 810-812. (2014)
194. Walgrave, SE., Warshaw, EM., Glesne, LA. Allergic contact dermatitis from propolis. *Dermatitis.* 16(4), 209-215. (2005)
195. Wanscher, B. Contact dermatitis from propolis. *Br J Dermatol.* 94(4), 451-456. (1976)
196. Wolf, CW. *Apis Mellifera The Poison of the Honey Bee Considered as a Therapeutic Agent.* W. Radde. Philadelphia. (1858).
197. Zhu F, Wongsiri S. Special article a brief introduction to apitherapy health care, *Journal of Thai Traditional and Alternative Medicine*, vol. 6, no. 3, pp. 303-312, (2008).
198. Yhoungh-Aree, J., Puwastien, P., Attig, GA. Edible insects in Thailand: An unconventional protein source?, *Ecology of Food and Nutrition.* 36: 133-149. (1997)
199. Yonei, Y., Shibagaki, K., Tsukada, N., Nagasu, N., Inagaki, Y., Miyamoto, K., Suzuki, O., Kiryu, Y. Case report: haemorrhagic colitis associated with royal jelly intake. *J Gastroenterol Hepatol.* 12(7), 495-499. (1997)
200. Yücel, B., Acikgoz, Z., Bayraktar, H., Seremet, C. The effects of apilarnil (drone bee larvae) administration on growth performance and secondary sex characteristics of male broilers. *Journal of Animal and Veterinary Advances* 10 (17): 2263-2266. (2011)
201. Yücel, B., Ceylan, H. Ari (havası) ve sesinin apiterapi'de kullanımı. Alınmıştır: Ari Ürünleri ve Sağlık (Apiterapi). Ed.: Akçicek, E., Yücel, B. Sidas, İzmir. s:177-182. (2015)
202. Zerrouk, SH., Fallico, BG., Arena, EN., Ballistreri, GF., Bougħediri, LA. Quality evaluation of some honey from the central region of Algeria. *Jordan J Biol Sci.* 4(4), 243-248. (2011)
203. Zhi-Yi, L. Insects as food in China. *Ecology of Food and Nutrition.* 36: 201-207. (1997)