

## References

1. Rathore DS, Chauhan S, Sharma N. Changes in the Fat and Oil Contents of Vegetable Tanned Finished Leather of Sheep Due to Aeromycoflora under Varying Environmental Conditions. *Bionano Frontier* 2012; 9(1): 316-318.
2. Rathore DS, Sharma N, Chauhan S. Isolation, Screening and Relative Capacity of Fungi which Causes Infestation of Finished Leather. *Int. J. Curr. Microbiol. Appl. Sci.* 2013; 2(4): 74-83.
3. Chang JS, Kuo TS. Kinetics of Bacterial Decolorization of Azo Dye with *Escherichia coli* NO<sub>3</sub>. *Bioresour. Technol.* 2000; 75: 107.
4. Van der Zee FP, Villaverde S. Combined Anaerobic-Aerobic Treatment of Azo Dyes - A Short Review of Bioreactor Studies. *Water Res.* 2005; 39, 1425.
5. Falkiewicz-Dulik M, Macura AB. Footwear Hygiene in the Foot Mycosis Profilaxis. *Mikol. Lek.* 2006; 13(4): 265-271.
6. Falkiewicz-Dulik M, Janda K, Wypych J. Handbook of Biodegradation, Biodeterioration, and Biostabilization 2<sup>nd</sup> Edition. *ChemTec Publishing*, Toronto 2015.
7. Wroński AS, Nowicki R. Etiology Of Superficial Fungal Infection In Contemporary Mycological Diagnostic Methods. *Mikol. Lek.* 2005; 12(3): 197-202.
8. Kamińska-Winciorek G, Brzezińska-Wcisło L. Frequency of Tinea Pedis and Pathological Agents in Selected Social and Occupational Men's Groups – in Coal-Miners (Part I). *Mikol. Lek.* 2005; 12(4): 253-259.
9. Kamińska-Winciorek G, Brzezińska-Wcisło L. Frequency of Tinea Pedis and Pathological Agents in Selected Social and Occupational Men's Groups – at Metallurgists (Part II). *Mikol. Lek.* 2005; 12(4): 261-265.
10. Nowicki R. Foot Mycosis in the Light of Clinical, Microbiological and Epidemiological Studies. Dissertation for the Degree of Doctor of Medicine. Akademia Medyczna w Gdańsk, 1988.
11. Kralewski W, Noras E. Epidemiology of Foot Fungal Infections in Swimmers. *Przegl. Dermatol.* 1993; 1: 10-12.
12. Wilksowski A, Siedlewicz A, Nowicki R, Szarmach A, Szarmach H. Dermatomycosis in Children in the District of Gdańsk. *Mikol. Lek.* 1995; 2(1): 23-31.
13. Panek D, Bykowska B, Nowicki R. Fungal Infections in the Material of the Gumed Dermatological Clinic in Gdańsk. In The Years 2000-2011. *Mikol Lek* 2013; 20(1): 16-18.
14. Sedlarik V. Antimicrobial Modifications of Polymers. *Biodegr. - Life. Sci.*, Chamy R. (Ed.), *InTech* 2013; 188-204.
15. Gendaszewska D, Szuster L, Wyrębska Ł, Piotrowska M. Antimicrobial Activity of Monolayer and Multilayer Films Containing Polyhexamethylene Guanidine Sulphanilate. *FIBRES & TEXTILES in Eastern Europe* 2018; 26, 2(128): 73-78. DOI: 10.5604/01.3001.0011.5742.
16. Ahmad S, Ashraf M, Ali A, Shaker K, Umair M, Afzal A, Nawab Y, Rasheed A. Preparation of Conductive Polyethylene Terephthalate Yarns by Deposition of Silver & Copper Nanoparticles. *FIBRES & TEXTILES in Eastern Europe* 2017; 25, 5(125): 25-29. DOI: 10.5604/01.3001.0010.4623.
17. Ziąbka M, Dziadek M. Surface Properties of Polymeric Composites with Silver Nanoparticles. *FIBRES & TEXTILES in Eastern Europe* 2018; 26, 6(132): 114-119. DOI: 10.5604/01.3001.0011.5169.
18. Ziąbka M, Dziadek M. Surface Properties of Polymeric Composites with Silver Nanoparticles. *FIBRES & TEXTILES in Eastern Europe* 2018; 26, 6(132): 114-119. DOI: 10.5604/01.3001.0011.5169.
19. Gobalakrishnan M, Saravanan D. Antimicrobial Activity of Coleus ambonicus Herbal Finish on Cotton Fabric. *FIBRES & TEXTILES in Eastern Europe* 2017; 25, 4(124): 106-

108. DOI: 10.5604/01.3001.0010.2854.
- 20. Xue Y, Xiao H, Zhang Y. Antimicrobial polymeric materials with quaternary ammonium and phosphonium salts. *Int. J. Molecular Sci.* 2015; 16: 3626-3655.
  - 21. Tissier Ch, Chesnais M. Supplement to the methodology for risk evaluation of biocides. INERIS France 2001.
  - 22. Orlita A. Microbial biodeterioration of leather and its control: A review. *Int. Biodegr. Biodegr.* 2004; 53(3): 157-163.
  - 23. Akpomie OO. The preservative potentials of sweet orange seed oil on leather products in Nigeria. *Afr. J. Biotechnol.* 2010; 9 (5), 678-681.
  - 24. Širvaitytė J, Šiugždaitė J, Valeika V, Dambrauskienė E. Application of essential oils of thyme as a natural preservative in leather tanning. *Proc. Estonian Acad. Sci.* 2012; 61(3): 220–227.
  - 25. Christensen LP, Grevsen K. Effect of development stage at harvest on the composition and yield of essential oils from thyme and oregano. *Dev. Food. Sci.* 2006; 43: 261-264.
  - 26. Li H, Zhao CQ, Zhou J, Shao HH, Chen W Y. Isolation, purification and identification of bacteria from the shoes worn by children. *Afr. J. Biotechnol.* 2011; 10 (20): 4133-4137.
  - 27. Li H, Zhou J, Shi R, Chen W. Identification of fungi from children's shoes and application of a novel antimicrobial agent on shoe insole. *Afr. J. Biotechnol.* 2011; 10(65), 14493-14497.
  - 28. Pranab M, Jay B, Jyotsna C, Mahmoud GJ. Antifungal-botanical combinations provide effective, broad-spectrum activity against drug-resistant fungi and bacteria associated with foot infections and contaminated shoes. *Am. Acad. Dermatol.* 2009; 60(3): AB111.
  - 29. Patent WO 2011/039786 A1 Method for treatment of a semimanufactured product made of leather or similar material and item resulting thereof, 2011.
  - 30. Patent WO 2014/122573 A1 Process for treatment of semimanufactured products made of leather, imitation leather and/or fabrics and items comprising said semimanufactured products resulting thereof, 2014.
  - 31. Koizhaiganova M, Yasa I, Gülmser G. Assessment of antibacterial activity of lining leather treated with silver doped hydroxyapatite. *Int. Biodegr. Biodegr.* 2015; 105: 262-267.
  - 32. Hausam W. Leder und schuhwerk aus der sicht der bakteriologen. *Leder u Hautemarkt* 1970; 18: 266-268.
  - 33. Kołodziej T, Białyńiecki-Birula R. *Bacterial diseases [in:] Treatment of skin diseases and sexually transmitted diseases.* Ed. Szepietowski J, Reich A. Wyd. Lek. PZWL 2008; 70-79.
  - 34. Outline of medical mycology. Ed. Baran E. *Volumed* 1998.
  - 35. Szepietowski J, Reich A. Mycosis [in:] Treatment of skin diseases and sexually transmitted diseases. Ed. Szepietowski J, Reich A, *Wyd. Lek. PZWL* 2008; 83-102.
  - 36. Krzyściak P, Skóra M, Macura AB. Atlas of pathogenic fungi of man. *MedPharm Polska* 2011.
  - 37. Trzmiel D, Lis-Święty A, Bergler-Czop B. Clinical characteristics of dermatomycoses and mycotic infections of skin appendages in the practice of a general physician – a still live issue. *Med. Og. Nauk. Zdr.* 2011; 17( 4): 212-217.
  - 38. Pawlik B, Macura AB, Sopota B, Falkiewicz-Dulik M. Evaluation of antifungal activity of chemicals used in footwear sanitisation. *Mikol. Lek.* 2003; 10(4): 285-294.
  - 39. Skóra J, Gutarowska B, Śnioszek A. Microbial contamination in tanneries-a threat to the processed material, leather goods and health of workers in the tanneries. *Przegl. Włók. WOS* 2014; 1: 26-33.
  - 40. PN-EN ISO 20645: 2006 Textile fabrics - Determination of antibacterial activity - Agar diffusion plate test.

41. PN-EN 14119: 2005 Testing of textiles - Evaluation of the action of microfungi.