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## List of references supporting the assessment of *Cucurbita pepo L.*, semen

Final

**The Agency acknowledges that copies of the underlying works used to produce this monograph were provided for research only with exclusion of any commercial purpose.**

Abdel-Rahman MK. Effect of pumpkin seed (*Cucurbita pepo L.*) diets on benign prostatic hyperplasia (BPH): chemical and morphometric evaluation in rats. *World J Chem* 2006, 1(1):33-40

Akihisa T, Shimizu N, Ghosh P, Thakur S, Rosenstein FU, Tamura RT, Matsumoto T. Sterols of the Cucurbitaceae. *Phytochemistry* 1987, 26:1693-1700

Akihisa T, Thakur S, Rosenstein FU, Matsumoto T. Sterols of Cucurbitaceae: the Configurations at C-24 of 24-Alkyl- $\Delta^5$ -,  $\Delta^7$ - and  $\Delta^8$ -Sterols. *Lipids* 1986, 21:39-47

Alekseeva MV. Investigation of salt-soluble proteins of pumpkin seeds (*Cucurbita pepo L.*) by a column gradient extraction method. *Biokhimiia*. 1965, 30:60-66

Alfawaz MA. Chemical composition and oil characteristics of Pumpkin (*Cucurbita maxima L.*) seed kernels. *Res Bull* 2004, 129:5-18

Al-Khalifa AS. Physicochemical characteristics, fatty acid composition, and lipoxygenase activity of crude pumpkin and melon seed oils. *J Agric. Food Chem.* 1996, 44:964-966

Al-Zuhair H, Abd el-Fattah AA, El-Sayed MI. Pumpkin-seed oil modulates the effect of felodipine and captopril in spontaneous hypertensive rats. *Pharmacol Res.* 2000, 41:555-563

Al-Zuhair H, Abd el-Fattah AA, Abd el Latif HA. Efficacy of simvastatin and pumpkin-seed oil in the management of dietary-induced hypercholesterolemia. *Pharmacol Res.* 1997, 35:403-408

Andersson KE, Wein AJ. Pharmacology of the Lower Urinary Tract: Basis for Current and Future Treatments of Urinary Incontinence. *Pharmacol Rev* 2004, 56:581-631

Andres TC. Cucurbitaceae and home of the cucurbit network. <http://www.cucurbit.org/index.html> 2003



Andrikopoulos NK, Chiou A, Mylona A. Triacylglycerol species of less common edible vegetable oils. *Food Rev Int.* 2004, 20: 389-405

Appendino G, Jakupovic J, Belloro E, Marchesini A. Triterpenoid p-amino benzoates from the seeds of zucchini. *Fitoterapia* 2000, 71: 258-263

Appendino G, Jakupovic J, Belloro E, Marchesini A. Multiflorane triterpenoid esters from pumpkin. An unexpected extrafolic source of PABA. *Phytochemistry* 1999, 51: 1021-1026

Ardabili AG, Farhoosh R, Khodaparast HH. Chemical composition and physicochemical properties of pumpkin seeds (*Cucurbita pepo* subsp. *pepo styriaka*) grown in Iran. *J Agr Sci Tech* 2011, 13: 1053-1063

Auel W. Zur Heilwirkung des Kürbiskerns beim prostatischen Symptomenkomplex. *Landarzt* 1962, 38: 372-373

Azevedo-Meleiro CH, Rodriguez-Amaya DB. Qualitative and quantitative differences in carotenoid composition among *Cucurbita moschata*, *Cucurbita maxima*, and *Cucurbita pepo*. *J Agric Food Chem* 2007, 55: 4027-403

Bach D. Placebokontrollierte Langzeit-therapiestudie mit Kürbissamenextrakt bei BPH-bedingten Miktionsbeschwerden. *Urologe [B]* 2000, 40: 437-443

Barbieri L, Polito L, Bolognesi A, Ciani M, Pelosi E, Farini V et al. Ribosome-inactivating proteins in edible plants and purification and characterization of a new ribosome-inactivating protein from *Cucurbita moschata*. *Biochim Biophys Acta* 2006, 1760: 783-792

Bastić M, Bastić LJ, Jovanović JA, Spiteller G. Sterols in pumpkin seed oil. *J Am Oil Chem Soc* 1977, 54: 525-527

Blagrove RJ, Lilley G. Characterization of Cucurbitin from various species of the Cucurbitaceae. *Eur J Biochem* 1980, 103: 577-584

Bombardelli E, Morazzoni P. *Cucurbita pepo* L. *Fitoterapia* 1997, 48: 291-302

Bradley P. Pumpkin seed. *Cucurbitae peponis semen*. British Herbal Compendium. Vol 2. BHMA Bornemouth 2006, 320-324

Bravi E, Perretti G, Montanari L. Fatty acids by high-performance liquid chromatography and evaporative light-scattering detector. *J Chromatogr A* 2006, 1134: 210-214

Bruneton J. Pharmacognosy, Phytochemistry, Medicinal Plants Lavoisier Publishing Inc, Intercept Ltd, London New York 1995

Carbin BE, Eliasson R. Curbicin vid behandling av benign prostatahyperplasi (BPH) (Ett placebokontrolerat forsook med 26 patienter). *Swed J Biol Med* 1989, 2: 7-9

Carbin BE, Larsson B, Lindahl O. Treatment of benign prostatic hyperplasia with phytosterols. *Br J Urol* 1990, 66: 639-641

Cerdeira PM, Freitas MCJ, Pumar M, Santangelo SB. Efeito da farinha de semente de abóbora (*Cucurbita maxima* L.) sobre o metabolismo glicídico e lipídico em ratos. *Rev Nutr Campinas* 2008, 21: 129-136

Chevallier A. *Cucurbita pepo*. Pumpkin In: Encyclopedia of Medicinal Plants. Dorling Kindersley, London 1996

Chung WC, Ko B. Treatment of *Taenia saginata* infection with mixture of areca nuts and pumpkin seeds. *Zhonghua Min Guo Wei Sheng Wu Xue Za Zhi* 1976, 9: 31-35

Cruz RCB, Meurer CD, Silva EJ, Schaefer C, Santos ARS, Bella Cruz A, Filho VC. Toxicity evaluation of *Cucurbita maxima* seed extract in mice. *Pharmaceutical Biol* 2006, 44: 301-303

Deutsches Arzneibuch, 10<sup>th</sup> ed. (DAB 10). 1999. Kürbissamen – *Cucurbita pepo* seeds. Deutscher Apotheker Verlag. Stuttgart

Duke JA. CRC Handbook of Medicinal Herbs. CRC Press, Inc. Boca Raton. London, New York, Washington 2000

EFSA Compendium Botanical Safety Concerns. *Cucurbita pepo*. *EFSA Journal* 2009, 7(9): 30

EFSA Scientific Opinion of the Panel on Food Additives and Nutrient Sources added to Food Selenious acid as a source of selenium added for nutritional purposes to food supplements 1 (Question No EFSA-Q-2006-278). Adopted on 19 March 2009. *EFSA J* 2009, 1009: 1-17

EI-Adawy TA, Taha KM. Characteristics and composition of different seed oils and flours. *Food Chem* 2001, 74: 47-54

ESCOP. Cucurbitae semen (Pumpkin Seed). In: ESCOP Monographs. 2<sup>nd</sup> edition, supplement 2009. European Scientific Cooperative on Phytotherapy, editor. Georg Thieme Verlag, Stuttgart 2009, 50-56

Fahim AT, Abd-el-Fattah AA, Agha AM, Gad MZ. Effect of pumpkin-seed oil on the level of free radical scavengers induced during adjuvant-arthritis in rats. *Pharmacol Res* 1995, 31: 73-79

Fang EF, Wong JH, Lin P, Ng TB. Biochemical characterization of the RNA-hydrolytic activity of a pumpkin 2S albumin. *FEBS Lett.* 2010, 584: 4089-4096

Feng LC. The combined use of pumpkin seed and areca nut in the treatment of tapeworm infections. *Chin Med J* 1956, 74: 17-36

Figueredo E, Cuesta-Herranz J, Minguez A, Vidarte L, Pastor C, De Las Heras M, Vivanco F, Lahoz C. Allergy to pumpkin and cross-reactivity to other Cucurbitaceae fruits. *J Allergy Clin Immunol* 2000, 106: 402-403

Friedrich M, Theurer C, Schiebel-Schlosser G. Prosta Fink Forte® kapseln in der Behandlung der benignen Prostatahyperplasie. Eine multizentrische Anwendungsbeobachtung an 2245 Patienten. *Forsch Komplementärmed Klass Naturheilkd.* 2000, 7: 200-204

Fritsch R, Ebner H, Kraft D, Ebner C. Food allergy to pumpkinseed—characterization of allergens. *Allergy* 1997, 52: 335-337

Fruhwirth GO, Hermetter A. Seeds and oil of the Styrian oil pumpkin: components and biological activities. *Eur J Lipid Sci Technol* 2007, 109: 1128-1140

Fruhwirth GO, Hermetter A. Production technology and characteristics of Styrian pumpkin seed oil. *Eur J Lipid Sci Technol* 2008, 110: 637-644

Fruhwirth GO, Wenzl T, El-Toukhy R, Wagner FS, Hermetter A. Fluorescence screening of antioxidant capacity in pumpkin seed oils and other natural oils. *Eur J Lipid Sci Technol* 2003, 105: 266-274

Garg VK, Nes WR. Occurrence of Δ5-sterols in plants producing predominantly Δ7-sterols: studies on the sterol compositions of six Cucurbitaceae seeds. *Phytochemistry* 1986, 25: 2591-2597

Gasperi-Campani A, Barbieri L, Lorenzoni E, Stirpe F. Inhibition of protein synthesis by seed extract. *FEBS Lett* 1977, 76: 173-176

Gerhäuser C, Samtleben R, Tan GT, Pezzuto JM, Lottspeich F, Wagner H. Peponin, a new ribosome-inactivating protein isolated from the seeds of *Cucurbita pepo* L. inhibits human immunodeficiency virus Type 1 reverse transcriptase. *Pharm Pharmacol Lett* 1993, 3: 71-75

Gemrot F, Barouh N, Vieu JP, Pioch D, Montet D. Effect of roasting on tocopherols of gourd seeds (*Cucurbita pepo*). *Grasas y Aceites* 2006, 57: 409-414

German Commission E Monograph. *Cucurbitae peponis semen*. Bundesanzeiger No. 223 of 30 November 1985, amended in Bundesanzeiger No. 11 of 17 January 1991

Glew RH, Glew RS, Chuang LT, Huang YS, Millson M, Constans D, Vanderjagt DJ. Amino acid, mineral and fatty acid content of pumpkin seeds (*Cucurbita spp*) and *Cyperus esculentus* nuts in the Republic of Niger. *Plant Foods Hum Nutr* 2006, 61: 51-56

Gossell-Williams M, Lyttle K, Clarke T, Gardner M, Simon O. Supplementation with pumpkin seed oil improves plasma lipid profile and cardiovascular outcomes of female non-ovariectomized and ovariectomized Sprague-Dawley rats. *Phytother-Res* 2008 22: 873-877

Gossell-Williams M, Davis A, O'Connor N. Inhibition of testosterone-induced hyperplasia of the prostate of Sprague-Dawley rats by pumpkin seed oil. *J Med-Food* 2006, 9: 284-286

Gruenwald J, Brendler T, Jaenicke C (Ed.). PDR for Herbal Medicines. *Cucurbita pepo*. Medical Economics Co., Inc., Montvale, NJ. 2000, 618-619

Gruenwald J, Brendler T, Jaenicke C (Ed.). PDR for Herbal Medicines. *Cucurbita pepo*. Thomson Medical Economics, Montvale NJ. 2004

Guideline on the management of benign prostatic hyperplasia (BPH). 2003 (revised 2010 Jan) NGC:008255. *American Urological Association Education and Research, Inc.* - Medical Specialty Society, <http://guideline.gov/content.aspx?id=25635&search=bph>. Accessed 10.08.2012

Gupta Geeta RP, Maheshwari SC. Cytokinins in seeds of pumpkin. *Plant Physiol* 1970, 45: 14-18

Habib H, Fazili KM. Plant protease inhibitors: a defense strategy in plants. *Biotech Mol Biol Rev* 2007, 2: 68-85. Available at: <http://www.academicjournals.org/BMBR>

Hagendorens MM, Carrette M, Bridts CH, Stevens WJ, Ebo DG. Allergy from giant pumpkin (*Cucurbita maxima*) is not a fairy tale. *Allergy* 2009, 64: 1686-1696

Haiyan Z, Bedgood DR, Bishop AG, Prenzler PD, Robards K. Endogenous biophenol, fatty acid and volatile profiles of selected oils. *Food Chem* 2007, 100: 1544-1551

Hamvas A, Corradi GY, Hegedüs, Frang D. Experience with the Peponen® capsule in the management of benign prostatic hyperplasia. *Int Urol Nephrol* 1991, 23: 51-55

Hänsel R, Keller K, Rimpel H, Schneider G. *Cucurbita* Hagers Handbuch der Pharmaceutischen Praxis 5. vollständig neubearbeitete Auflage. Springer-Verlag Berlin Heidelberg New York, 1994, 1068-1079

Hata, Tanahashi S, Wakida Y, Tatsuzaki M, Koide A. Effects of pumpkin seed extract on urinary bladder function in anesthetized rats. *Med Sci Pharm Sci* 2005, 54: 1-10. Available at: <http://www.scicom.pdf.se/uretin/hata-2005.pdf> Henderson CW, Scheerens JC, Berry JW. Antinutritional factors in *Cucurbita* seed meals. *J Agric Food Chem* 1986, 34: 434-436

Héthelyi E, Tétényi P, Zámbó I, Kaposi P. GC/MS investigation of different fatty acids from seeds of some medicinal plants. *Herba Hungarica* 1989, 28: 69-78

Hojima Y, Pierce JV, Pisano JJ. Pumpkin seed inhibitor of human factor XIIa (activated Hageman Factor) and bovine trypsin. *Biochem J* 1982, 21: 3741-3746

Hsüeh-Chang C, Ming H. Pumpkin seed (*Cucurbita moschata*) in the treatment of acute schistosomiasis. *Chinese Med J* 1960, 80:115-120

Hubbell RB, Vickery HB, Nolan LS. Cucurbit seed globulins. II. Use as substitutes for edestin in experimental diets. *J Nutr* 1942, 99:101

Hungarian Observational Studies with pumpkin seed oil, 1988-1989. Hungarian National Drug Agency

Huang KC. Anthelmintics. The Pharmacology of Chinese Herbs, Second Edition. CRC Press 1998. DOI: 10.1201/9781420048261

Janick J, Paris H. The Cucurbit image (1515-1518) of the Villa Farnesina, Rome. *Ann Bot* 2006, 97:165-176

Kim MY, Kim EJ, Kim Y-N, Choi C, Lee B-H. Comparison of the chemical compositions and nutritive values of various pumpkin (Cucurbitaceae) species and parts. *Nutr Res Pract* 2012, 6:21-27

Kimmel JR, Smith EL. The amino acid composition of crystalline pumpkin seed globulin, edestin, C phycocyanin and R-phycoerythrin. *Bull-Soc-Chim-Biol-(Paris)* 1958, 40: 2049-2065

Kreft I, Stibilj V, Trkov Z. Iodine and selenium contents in pumpkin (*Cucurbita pepo L.*) oil and oil-cake. *Eur Food Res Technol* 2002, 215:279-281

Kreft M, Zorec R, Janes D, Kreft S. Histolocalisation of the oil and pigments of the pumpkin seeds. *Ann Appl Biol* 2009, 154:413-418

Küsmenoğlu S. Fatty acid composition of oils in Cucurbitaceae seeds. *J Fac Pharm Gazi* 1996, 13:167-170

Lahon LC, Khanikor HN, Ahmed N, Gogoi AR. Preliminary pharmacological and anticestodal screening of *Cucurbita maxima*. *Ind J Pharmac* 1978, 10:315-317

Lazos ES. Certain functional properties of defatted pumpkin seed flour. *Plant Food Hum Nutr* 1992, 42:257-273

Leluk J. Serine proteinase inhibitor family in squash seeds: mutational variability mechanism and correlation. *Cell Mol Biol Lett* 2000, 5:91-106

Li W, Koike K, Tatsuzaki M, Koide A, Nikaido T. Cucurbitosides F-M, acylated phenolic glycosides from the seeds of *Cucurbita pepo*. *J Nat Prod* 2005, 68:1754-1757

Liang Y, Marlowe C, Waddell WJ. Autoradiographic study on tissue localization of [<sup>14</sup>C]cucurbitine in mice. *Acta Pharmacol Sin* 1982, 3:267-269

MacMillan J. Biosynthesis of the gibberellin plant hormones. *Nat Prod Rep* 1997, 14: 221-243

Madaus G. Lehrbuch der Biologischen Heilmittel. *Cucurbita pepo*. Kürbis. Cucurbitaceae. Georg Thieme Verlag, Leipzig 1938. Available at: <http://www.henriettesherbal.com/eclectic/madaus/cucurbita.html>

Madersbacher S, Ponholzer A, Berger I, Marszałek M. Medical Management of BPH: Role of Plant Extracts. *EAU EBU Update Series* 2007, 5:197-205

Mahmoud LH, Basiouny SO, Dawoud HA. Treatment of experimental heterophyiasis with two plant extracts, areca nut and pumpkin seed. *J Egypt Soc Parasitol* 2002, 32:501-506

Makni M, Fetoui H, Gargouri NK, Garoui EM, Jaber H, Makni J, Boudawara T, Zeghal N. Hypolipidemic and hepatoprotective effects of flax and pumpkin seed mixture rich in ω-3 and ω-6 fatty acids in hypercholesterolemic rats. *Food Chem Toxicol* 2008, 46:3714-3720

Mansour EH, Dworschak E, Lugasi A, Barna E, Gergely A. Nutritive value of pumpkin (*Cucurbita pepo* Kakai 35) seed products. *J Sci Food Agric* 1993, 61:73-78

Marie-Magdeleine C, Hoste H, Mahieu M, Varo H, Archimede H. *In vitro* effects of *Cucurbita moschata* seed extracts on *Haemonchus contortus*. *Vet Parasitol* 2009, 161:99-105

Martindale. The Complete Drug Reference. The Pharmaceutical Press 2007

Matus Z, Molnar P, Szabo LG. Olajtök (*Cucurbita pepo* convar. *pepo* var. *styriaca*) magjából nyert prémadaradék össz-karotetinoid-tartalmanák és karotinoid- összetételének meghatározása. *Acta Pharm Hung* 1993, 63: 5:247-256

Mägi E, Talvik H, Järvis T. *In vivo* studies of the effect of medicinal herbs on the pig nodular worm (*oesophagostomum* spp.). *Helminthologia* 2005, 42:67-69

Miranian VH, Abou-Chaar CI. Extraction, Detection and Estimation of Cucurbitin in *Cucurbita* Seeds. *Lloydia* 1968, 31:23-29

Miralles JC, Negro JM, Sánchez-Gascón F, García M, Pascual A. Occupational rhinitis/asthma to courgette. *Allergy* 2000, 55:407-408

Murkovic M, Hillebrand A, Winkler J, Pfannhauser W. Variability of vitamin E content in pumpkin seed (*Cucurbita pepo* L.). *Z Lebensm Unters Forsch*. 1996a, 202:275-278

Murkovic M, Hillebrand A, Winkler J, Leitner E, Pfannhauser W. Variability of fatty acid content in pumpkin seeds (*Cucurbita pepo* L.). *Z-Lebensm-Unters-Forsch* 1996b, 203:216-219

Murkovic M, Mülleider U, Neunteufel H. Carotenoid Content in Different Varieties of Pumpkins. *J Food Comp Anal* 2002, 15:633–638

Murkovic M, Piironen V, Lampi AM, Kraushofer T, Sontag G. Changes in chemical composition of pumpkin seeds during the roasting process for production of pumpkin seed oil (Part 1: non-volatile compounds). *Food Chem* 2004, 84:359–365

Ng TB. Antifungal proteins and peptides of leguminous and non-leguminous origins. *Peptides* 2004, 25:1215-1222

Nitsch-Fitz R, Egger H, Wutzl H, Maruna H. Einsatz des Kürbiskern-Diätetikums "Kürbis-Granufink" bei Patienten mit Prostatahyperthrophie in Wiener Allgemeinpraxen. *Ehk* 1979, 12:1009-1013

Nkosi CZ, Opoku AR, Terblanche SE. Effect of pumpkin seed (*Cucurbita pepo*) protein isolate on the activity levels of certain plasma enzymes in CCl<sub>4</sub>-induced liver injury in low-protein fed rats. *Phytother Res* 2005, 19:341-345

Nkosi CZ, Opoku AR, Terblanche SE. Antioxidative effects of pumpkin seed (*Cucurbita pepo*) protein isolate in CCl<sub>4</sub>-induced liver injury in low-protein fed rats. *Phytother Res* 2006<sup>a</sup>, 20:935-940

Nkosi CZ, Opoku AR, Terblanche SE. *In vitro* antioxidative activity of pumpkin seed (*Cucurbita pepo*) protein isolate and its *in vivo* effect on alanine transaminase and aspartate transaminase in acetaminophen-induced liver injury in low protein fed rats. *Phytother Res* 2006b, 20: 780–783

Otlewski J, Polanowski A, Leluk J, Wilusz T. Trypsin inhibitors in summer squash (*Cucurbita pepo*) seeds. Isolation, purification and partial characterization of three inhibitors. *Acta Biochim Pol* 1984, 31:267-278

Otlewski J, Wilusz T. The serine proteinase inhibitor from summer squash (*Cucurbita pepo*): some structural features, stability and proteolytic degradation. *Acta Bioch Pol* 1985, 32:285-294

Otlewski J, Krowarsch D. Squash inhibitor family of serine proteinases. *Acta Bioch Pol* 1996, 43: 431-444

Parry J, Cheng Z, Moore J, Yu L. Fatty acid composition, antioxidant properties, and antiproliferative capacities of cold-pressed seed flours. *JAOCs* 2008, 85: 457-464

Płotnikow NN, Karnauhow, WK, Ozereckowskaja NN, Stromskaja TF, Firsowa RA. Clinical trials of Cucurbin (a preparation from pumpkin seeds) in cestodes infections. *Med Parasitol* 1972, 41: 407-411 [in Russian]

Polanowski A, Wilusz T., Nienartowicz B, Cieslar E, Słomińska A, Nowak K. Isolation and partial amino acid sequence of the trypsin inhibitor from the seeds of *Cucurbita maxima*. *Acta Biochim Pol* 1980, 27: 371-383

Polanowski A, Cieslar E, Otlewski J, Nienartowicz B, Wilimowska-Pelc A, Wilusz T. Protein inhibitors of trypsin from the seeds of Cucurbitaceae plants. *Acta Biochim Pol* 1987, 34: 395-406

Pranabendu M, Ramaswamy HS, Chang KS. Pumpkin (*Cucurbita maxima*) seed oil extraction using supercritical carbon dioxide and physicochemical properties of the oil. *J Food Eng* 2009, 95: 208-213

Queiroz-Neto A, Mataqueiro MI, Santana AE, Alessi AC. Toxicologic evaluation of acute and subacute oral administration of *Cucurbita maxima* seed extracts to rats and swine. *J Ethnopharmacol* 1994, 43: 45-51

Rauwald HW, Sauter M, Schilcher H. A 24-beta-ethyl-DELTA-7-sterylglucopyranoside from Cucurbita pepo seeds. *Phytochemistry* 1985, 24: 2746-2748

Reindl J, Anliker MD, Karamloo F, Vieths S, Wüthrich B. Allergy caused by ingestion of zucchini (Cucurbita pepo): characterization of allergens and cross-reactivity to pollen and other foods. *J Allergy Clin Immunol* 2000, 106: 379-385

Roehrborn CG. Currently available treatment guidelines for men with lower urinary tract symptoms. *BJUI International*, Suppl. 2. 2008, 102: 18-23

Ryan E, Galvin K, O'Connor TP, Maguire AR, O'Brien NM. Phytosterol, squalene, tocopherol content and fatty acid profile of selected seeds, grains, and legumes. *Plant Foods Hum Nutr* 2007, 62: 85-91

Rybaltovskii OV. [On the discovery of cucurbitin-a component of pumpkin seed with anthelmintic action]. *Med Parazitol* (Mosk). 1966, 35: 487-488 [Russian language]

Sauter M, Schilcher H, Segebrecht S. "Pumpkin seed oil" and its adulteration. Testing for identity and purity of pumpkin seed oil with the aid of thin-layer chromatography. *Pharm Ztg* 1985, 130: 73-75

Schaefer H, Renner SS. Phylogenetic relationships in the order Cucurbitales and a new classification of the gourd family (Cucurbitaceae). *Taxon* 2011, 60: 122-138

Schiebel-Schlosser G, Friederich M. Kürbissamen in der phytotherapie der BPH. *Z. Phytotherapie* 1998, 19: 71-76

Schilcher H, Dunzendorfer U, Ascali F. Delta 7-sterole, das prostatotrope Wirkprinzip in Kürbissamen? *Urologe [B]* 1987, 27: 316-319

Schleich S, Papaioannou M, Baniahmad A, Matusch R. Extracts from *Pygeum africanum* and other ethnobotanical species with antiandrogenic activity. *Planta Med* 2006, 72: 807-813

Schmandke H. Cucurbitacine mit antikrebswirkung in Gurken- und Kürbisgewächsen. *Ernährung* 2008, 2: 222-226

Schmidlin CB, Kreuter MH. *Cucurbita pepo*. Möglicher Einfluss auf hormonelle Ungleichgewichte bei Inkontinenz. *Z Phytotherapie* 2003, 3:16-18

Shu-Hwa S, Bao-Jo S, Yi-Hsun H, Yuan-Ching Y, Cheou-Pei M. Studies on the prophylactico-therapeutic effect of cucurbitine in experimental schistosomiasis Japonica in mice. *Scientia Sin* 1962, 11:1527-1534

Sicilia T, Niemeyer HB, Honig DM, Metzler M. Identification and stereochemical characterization of lignans in flaxseed and pumpkin seeds. *J Agric Food Chem* 2003, 51:1181-1188

Stevenson DG, Eller FJ, Wang L, Jane J-L, Wang T, Inglett GE. Oil and tocopherol content and composition of pumpkin seed oil in 12 cultivars. *J Agric Food Chem* 2007, 55: 4005–4013

Suphakarn VS, Yarnnon C, Ngunboonsri P. The effect of pumpkin seeds on oxalcrystalluria and urinary compositions of children in hyperendemic area. *Am J Clin Nutr* 1987, 45:115-121

Suphiphat V, Morjaroen N, Pukboonme I, Ngunboonsri P, Lowhnoo T, Dhanamitta S. The effect of pumpkin seeds snack on inhibitors and promoters of urolithiasis in Thai adolescents. *J Med Assoc Thai* 1993, 76:487-493

Tsai Y-S, Tong Y-C, Cheng J-T, Lee C-Ho. Pumpkin seed oil and phytosterol-F can block testosterone/prazosin-induced prostate growth in rats. *Urol Int* 2006, 77:269-274

Tsaknis J, Lallas S, Lazos ES. Characterization of crude and purified pumpkin seed oil, *Grasas & Aceites* 1997, 48:267-272

Vassiliou AG, Neumann GM, Condon R, Polya GM. Purification and mass spectrometry-assisted sequencing of basic antifungal proteins from seeds of pumpkin (*Cucurbita maxima*). *Plant Sci* 1998, 134:141-162

Vieths S, Lüttkopf D, Reindl J, Anliker MD, Wüthrich B, Ballmer-Weber BK. Allergens in celery and zucchini. *Allergy* 2002, 57:100-105

Vogel P. Studies on Pumpkin Seed Oil. *Fette Seifen Anstrichmittel* 1978, 80: 315-317

Wallner-Liebmann S. Das steirische Kürbiskernöl. *JEM* 2011, 13:25-27

Wang HX, Ng TB. Isolation of cucurmoschin, a novel antifungal peptide abundant in arginine, glutamate and glycine residues from black pumpkin seeds. *Peptides* 2003, 24:969-972

Wang DC, Xiang H, Li D, Gao HY, Cai H, Wu LJ, Deng XM. Purine-containing cucurbitane triterpenoids from *Cucurbita pepo* cv dayangua. *Phytochemistry*. 2008, 69:1434-1438

Weinkamer E. Erfahrungsbericht über die Verwendung von Kürbis-Granufink. *Phys-Diät Ther* 1964, 9:1-2

WHO Monographs on Selected Medicinal Plants, Volume 4. Semen Cucurbitae. World Health Organization, Geneva 2009, 83-91

Wichtl M. Cucurbitae semen. Pumpkin seed. In: *Herbal Drugs and Phytopharmaceuticals*. Medpharm GmbH Scientific Publisher, CRC Press, Stuttgart: 2004, 170-172

Winkler C, Wirleitner B, Schroecknadel K, Schennach H, Fuchs D. Extracts of pumpkin (*Cucurbita pepo* L.) seeds suppress stimulated peripheral blood mononuclear cells *in vitro*. *Am J Immunol*. 2005, 1:6-11

Xanthopoulou MN, Nomikos T, Fragopoulou E, Antonopoulou S. Antioxidant and lipoxygenase inhibitory activities of pumpkin seed extracts. *Food Res Int* 2009, 42:641-646

Xia HC, Li F, Zhang ZC. Purification and characterization of moschatin, a novel type I ribosome-inactivating protein from the mature seeds of pumpkin (*Cucurbita moschata*), and preparation of its immunotoxin against human melanoma cells. *Cell Res* 2003, 13: 369-374

Yue QY, Jansson K. Herbal Drug Curbicin and Anticoagulant Effect with and without warfarin. Possible Related to the Vitamin E Component. *J An Geriatr Soc* 2001, 49: 838

Zdunczyk Z, Minakowski D, Frejnagel S, Flis M. Comparative study of the chemical composition and nutritional value of pumpkin seed cake, soybean meal and casein. *Nahrung* 1999, 43: 392-395

Zhang X, Ouyang J, Zhang Y, Tayalla B, Zhou X, Zhou S. Effect of the extracts of pumpkin seeds on the uroynamics of rabbits: an experimental study. *J Tongji Med Univ* 1994, 14(4) 235-238

Zhao S, Guo YX, Liu QH, Wang HX, Ng TB. Lectins but not antifungal proteins exhibit anti-nematode activity. *Environ Toxicol Pharmacol* 2009, 28: 265-268