

## References

- Achatz, G., Oberkofler, H., Lechnauer, E., Simon, B., Unger, A., Kandler, D., Ebner, C., Prillinger, H.J., Kraft, D. and Breitenbach, M. 1995. Molecular cloning of major and minor allergens of *Alternaria alternata* and *Cladosporium herbarum*. *Mol. Immunol.*, 32: 213-227.
- Ahloth, M., Alenius, H., Turjanmaa, K., Makinen-Kiljunen, S., Reunala, T. and Palosuo, T. 1995. Cross-reacting allergens in natural rubber latex and avocado. *J. Allergy Clin. Immunol.*, 96: 167-173.
- Akasawa, A., Hsieh, L-S., Martin, B.M., Liu, T. and Lin, Y. 1996a. A novel acidic allergen, Hev b 5, in latex. Purification, cloning and characterization. *J. Biol. Chem.*, 271: 25389-25393.
- Akasawa, A., Hsieh, L-S., Tanaka, K., Lin, Y. and Iikura, Y. 1996b. Identification and characterization of avocado chitinase with cross-reactivity to a latex protein [Abstract]. *J. Allergy Clin. Immunol.*, 97: 321.
- Alenius, H., Kalkkinen, N., Lukka, M., Reunala, T., Turjanmaa, K., Makinen-Kiljunen, S., Yip, E. and Palosuo, T. 1995a. Prohevein from the rubber tree (*Hevea brasiliensis*) is a major latex allergen. *Clin. Exp. Allergy*, 24: 659-665.
- Alenius, H., Kalkkinen, N., Lukka, M., Turjanmaa, K., Reunala, T., Makinen-Kiljunen, S. and Palosuo, T. 1995b. Purification and partial amino acid sequencing of a 27-kD natural rubber allergen recognized by latex-allergic children with spina bifida. *Int. Arch. Allergy Immunol.*, 106: 258-262.

- Alenius, H., Kalkkinen, N., Reunala, T., Turjanmaa, K. and Palosuo, T. 1996a. The main IgE-binding epitope of a major latex allergen, prohevein, is present in its N-terminal 43-amino acid fragment, hevein. *J. Immunol.*, 156: 1618-1625.
- Alenius, H., Kalkkinen, N., Yip, E., Hasmin, H., Turjanmaa, K., Makinen-Kiljunen, S., Reunala, T. and Palosuo, T. 1996b. Significance of rubber elongation factor as a latex allergen. *Arch. Allergy Immunol.*, 109: 362-368.
- Alenius, H., Kurup, V., Kelly, K., Palosuo, T., Turjanmaa, K. and Fink, J. 1994a. Latex allergy: frequent occurrence of IgE antibodies to a cluster of 11 latex proteins in patients with spina bifida and histories of anaphylaxis. *J. Lab. Clin. Med.*, 123: 712-720.
- Alenius, H., Makinen-Kiljunen, S., Ahlroth, H., Turjanmaa, K., Reunala, T. and Palosuo, T. 1996c. Cross-reactivity between allergens in natural rubber latex and banana studied by immunoblot and immunoblot inhibition methods. *Clin. Exp. Allergy*, 26: 341-348.
- Alenius, H., Makinen-Kiljunen, S., Turjanmaa, K., Palosuo, T. and Reunala, T. 1994b. Allergen and protein content of latex gloves. *Ann. Allergy*, 73: 315-320.
- Alenius, H., Palosuo, T., Kelly, K., Kurup, V., Reunala, T., Makinen-Kiljunen, S., Turjanmaa, K. and Fink, J. 1993. IgE reactivity to 14-kD and 27-kD natural rubber proteins in latex-allergic children with spina bifida and other congenital anomalies. *Int. Arch. Allergy Immunol.*, 102: 61-66.
- Alenius, H., Turjanmaa, K., Makinen-Kiljunen, S., Reunala, T. and Palosuo, T. 1994c. IgE immune response to rubber proteins in adults patients with latex allergy. *J. Allergy Clin. Immunol.*, 93: 859-863.

- Alenius, H., Turjanmaa, K., Palosuo, T., Makinen-Kiljunen, S. and Reunala, T. 1991. Surgical latex glove allergy: Characterization of rubber protein allergens by immunoblotting. *Int. Arch. Allergy Appl. Immunol.*, 96: 376-380.
- American Society for Testing and Materials. 1995. Standard test method for analysis of protein in natural rubber and its products. ASTM Designation: D5712-95.
- Andrews, E.H. and Dickenson, P.B. 1961. Preliminary electron microscope observations on the ultra-structure of the latex vessel and its contents in young tissues of *Hevea brasiliensis*. *Proc. Nat. Rubb. Res. Conf. 1960 Kuala Lumpur*, 756-765.
- Angove, S-N. and Pillai, N.M. 1965. Preservation of natural rubber latex concentrate, Part III- Evaluation of various organo zinc compounds as secondary preservatives. *Tran. Inst. Rubb. Ind.*, 41: 41-52.
- Appleyard, J., McCullough, J. and Ownby, D. 1994. Cross-reactivity between latex, ragweed, and blue grass allergens [Abstract]. *J. Allergy Clin. Immunol.*, 93: 182.
- Archer, B.L. 1960. The proteins of *Hevea brasiliensis* 4. Isolation and characterization of crystalline 'hevein'. *Biochem. J.*, 75: 236.
- Archer, B.L. 1976. Hevamine: a crystalline basic protein from *Hevea brasiliensis* latex. *Phytochem.*, 15: 297-
- Archer, B.L. and Audley, B.G. 1967. Biosynthesis of rubber. *Adv. in Enzymol. and Related Areas of Mol. Biol.*, 29: 221.
- Archer, B.L., Audley, B.G., Cockbain, E.G. and McSweeney, G.P. 1963a. The biosynthesis of rubber: Incorporation of mevalonate and isopentenyl pyrophosphate into rubber by *Hevea brasiliensis* latex fractions. *Biochem. J.*, 89: 565.

- Archer, B.L., Audley, B.G., McSweeney, G.P. and Tan, C.H. 1969. Studies on composition of latex serum and bottom fraction particles. *J. Rubb. Res. Inst. Malaya*, 21: 560-569.
- Archer, B.L., Barnard, D., Cockbain, E.G., Dickenson, P.B. and McMuller, A.I. 1963b. Structure, composition and biochemistry of *Hevea* latex. In *The Chemistry and Physics of Rubber-Like Substances* (Bateman, L. ed.), Maclaren and Sons Ltd., London, p. 41.
- Archer, B.L., Barnard, D., Cockbain, E.G., Cornforth, J.W., Cornforth, R.H. and Popjak, G. 1966. The stereochemistry of rubber biosynthesis. *Proc. Roy. Soc. B.*, 163: 519.
- Archer, B.L. and Cockbain, E.G. 1955. The proteins of *Hevea brasiliensis* latex (2) Isolation of the  $\alpha$ -globulin of fresh latex serum. *Biochem. J.*, 61: 508.
- Archer, B.L. and Cockbain, E.G. 1969. Rubber transferase from *Hevea brasiliensis* latex. *Meth. Enzymol.*, 15: 476.
- Archer, B.L. and McMullen, A.I. 1961. Some recent studies of the non-rubber constituents of natural rubber latex. *Proc. Nat. Rubb. Res. Conf. 1960 Kuala Lumpur*, 787-795.
- Arellano, R., Bradley, J. and Sussman, G. 1992. Prevalence of latex sensitization among hospital physicians occupationally exposed to latex gloves. *Anesthesiology*, 77: 905-908.
- Audley, B.G. 1965. Studies of an organelle in *Hevea* latex containing helical protein microfibrils. *Proc. Nat. Rubb. Prod. Res. Assoc. Jubilee Conf. 1964 Cambridge*, 67-79.
- Audley, B.G. 1966. The isolation and composition of helical protein microfibrils of *Hevea brasiliensis* latex. *Biochem. J.*, 98: 335.

- Avrameas, S. and Guilbert, B. 1971. A method for quantitative determination of cellular immunoglobulins by enzyme-labelled antibodies. *Eur. J. Immunol.*, 1: 394.
- Axelsson, J.G.K., Johansson, S.G.O. and Wrangsjö, K. 1987. IgE-mediated anaphylactoid reactions to rubber. *Allergy*, 42: 46-50.
- Bach, T.J. 1986. Hydroxymethylglutaryl CoA reductase, a key enzyme in phytosterol synthesis. *Lipids*, 21: 82-88.
- Banerjee, B., Wang, X., Kelly, K.J., Fink, J.N., Sussman, G.L. and Kurup, V.P. 1997. IgE from latex-allergic patients bind to cloned and expressed B cell epitopes of prohevein. *J. Immunol.*, 159: 5724-5732.
- Baur, X., Ammon, J., Chen, Z., Beckmann, U. and Cruppon, A.B. 1993. Health risk in hospitals through airborne allergens for patients presensitized to latex. *Lancet*, 342: 1148-1149.
- Baur, X., Chen, Z., Rozynek, P., Duser, M. and Raulf-Heimsoth, M. 1995. Cross-reacting IgE antibodies recognizing latex allergens, including Hev b 1, as well as papain. *Allergy*, 50: 604-609.
- Bealing, F.J. 1969. Carbohydrate metabolism in *Hevea* latex- availability and utilisation of substrates. *J. Rubb. Res. Inst. Malaya*, 21: 445-455.
- Beezhold, D.H. and Beck, W. 1992. Surgical glove powders bind latex antigens. *Arch. Surg.*, 127: 1354-1357.
- Beezhold, D.H., Kostyal, D.A. and Sussman, G.L. 1997. IgE epitope analysis of the hevein preprotein: a major latex allergen. *Clin. Exp. Immunol.*, 108: 114-121.
- Beezhold, D.H., Sussman, G.L., Kostyal, D.A. and Chang, N.S. 1994. Identification of a 46-kd latex protein allergen in health care workers. *Clin. Exp. Immunol.*, 98: 408-413.

- Beezhold, D.H., Sussman, G.L., Liss, G.M. and Chang, N.S. 1996. Latex allergy can induce clinical reactions to specific foods. *Clin. Exp. Allergy*, 26: 416-422.
- Blackley, D.C. 1966. High polymer latices, Vol. 1. Chapter IV. Maclaren and Sons Ltd. London. 214-237.
- Blanco, C., Carrillo, T., Castillo, R., Quirate, T. and Cuevas, M. 1994. Latex-allergy: clinical features and cross-reactivity with fruits. *Ann. Allergy*, 73: 309-314.
- Bloomfield, G.F. and Mumford, R.B. 1960. Low ammonia latices. *Tran. Inst. Rubb. Ind.*, 36: 251-262.
- Bobilioff, W. 1923. Anatomy and physiology of *Hevea brasiliensis*, Part.1 Anatomy of *Hevea brasiliensis*. *Art. Inst. Orell Fussli*, Zurich.
- Bonner, J. and Galstone, A.W. 1943. The physiology and biochemistry of rubber formation in plant. *Bot. Rev.*, 8: 543.
- Bowler, W.W. 1953. Electrophoretic mobility of fresh *Hevea* latex. *Ind. Eng. Chem.*, 45: 1790.
- Breiteneder, H. 1998. The allergens of *Hevea brasiliensis*. *ACI Int.*, 10: 101-109.
- Breton, F., Coupe, M., Sanier, C. and d' Auzac, J. 1995. Demonstration of  $\beta$ -1,3-glucanase activities in lutoids of *Hevea brasiliensis* latex. *J. nat. Rubb. Res.*, 10: 37-45.
- Broekaert, W., Lee, H.I., Kush, A., Chua, N.H. and Raikhel, N. 1990. Wound-induced accumulation of mRNA containing a hevein sequence in laticifers of rubber tree (*Hevea brasiliensis*). *Proc. Natl. Acad. Sci. USA*, 87: 7633-7637.

- Capriles-Hulett, A., Sanchez-Borges, M., Von-Scanozi, C. and Medina, J. 1995. Very low frequency of latex and fruit allergy in patients with spina bifida from Venezuela: influence of socioeconomic factors. *Ann. Allergy Asthma Immunol.*, 75: 62-64.
- Cardosa, M.J., Sharifah Hamid, Sunderasan, E. and Yeang, H.Y. 1994. B-serum is highly immunogenic when compared to C-serum using enzyme immunoassays. *J. nat. Rubb. Res.*, 9: 205-211.
- Carrillo, T., Cuevas, M., Munoz, T., Hinojosa, M. and Moneo, I. 1986. Contact urticaria and rhinitis from latex surgical gloves. *Contact Dermatitis*, 15: 69-72.
- Castresana, C., de Carvalho, F., Gheysen, G., Habets, M., Inze, D. and Van Montagu, M. 1990. Tissuespecific and pathogen-induced regulation of a *Nicotiana plumbaginifolia*  $\beta$ -1,3-glucanase gene. *Plant Cell*, 2: 1131-1143.
- Charous, B.L., Hamilton, R.G. and Yunginger, J.W. 1994. Occupational latex exposure: characteristics of contact and systemic reactions in 47 workers. *J. Allergy Clin. Immunol.*, 94: 12-18.
- Chen, S.F. and Ng, C.S. 1984. The natural higher fatty acid soaps in natural rubber latex and their effect on the stability of the latex. *Rubb. Chem. Technol.*, 57: 243.
- Chen, Z., Posch, A., Cremer, R., Raulf-Heimsoth, M., Rihs, H-P. and Baur, X. 1997a. Purification and characterization of rubber elongation factor (Hev b 1) from *Hevea* latex that acts as a major allergen in latex-allergic patients with spina bifida [Abstract]. *Allergy*, 52 (suppl. 37): 79.
- Chen, Z., Posch, A., Lohaus, C., Raulf-Heimsoth, M., Meyer, M.E. and Baur, X. 1997b. Isolation and identification of hevein as a major IgE-binding polypeptide in *Hevea* latex. *J. Allergy Clin. Immunol.*, 99: 402-409.

- Chen, Z., Posch, A., Raulf-Heimsoth, M. and Baur, X. 1996a. Isolation and identification of hevein as a major IgE-binding polypeptide in latex from *Hevea brasiliensis* [Abstract]. *J. Allergy Clin. Immunol.*, 97: 428.
- Chen, Z., Van Kamper, V., Raulf-Heimsoth, M. and Baur, X. 1996b. Allergenic and antigenic determinants of latex allergen Hev b 1: Peptide mapping of epitopes recognized by human, murine and rabbit antibodies. *Clin. Exp. Allergy*, 26: 406-415.
- Cheong, S.F. and Ong, C.O. 1974. New preservation systems for field latex. *J. Rubb. Res. Inst. Malasia*, 24: 118-124.
- Chin, H.C., Singh, M.M. and Loke, S.E. 1978. Effect of storage on the properties of high ammonia-preserved *Hevea* latex concentrate. *Proc. Intern. Polymer Latex Conf. London*.
- Chrestin, H. and Gidrol, X. 1986. Contribution of lutoidic tonoplast in regulation of cytosolic pH of latex from *Hevea brasiliensis*. *Proc. Int. Rubb. Conf. 1985 Kuala Lumpur*, Vol. III: 66-87.
- Chye, M.L. and Cheung, K.Y. 1995. B-1,3-Glucanase is highly-expressed in laticifers of *Hevea brailiensis*. *Plant Mol. Biol.*, 29: 397-402.
- Cockbain, E.G. and Philpott, M.W. 1963. Colloidal properties of latex. In *The Chemistry and Physics of Rubber-Like Substances* (Bateman, L. ed.), Maclaren and Sons Ltd., London, p. 73.
- Cook, A.S. 1960. The short-term preservation of natural latex. *J. Rubb. Res. Inst. Malaya*, 16: 65-75.
- Cook, A.S. and Sekhar, B.C. 1953. Fractions from *Hevea brasiliensis* latex centrifugation at 59,000 g. *J. Rubb. Res. Inst. Malaya*, 14: 163.
- Cramer, R., Faith, A., Hemmann, S., Jaussi, R., Ismail, C., Menz, G. and Blaser, K. 1996. Humoral and cell-mediated autoimmunity in allergy to *Aspergillus fumigatus*. *J. Exp. Med.*, 184: 265-270.



- Czuppon, A.B., Chen, Z., Rennert, S., Engelke, T., Meyer, H.E., Heber, M. and Baur, X. 1993. The rubber elongation factor of rubber trees (*Hevea brasiliensis*) is the major allergen in latex. *J. Allergy Clin. Immunol.*, 92: 690-697.
- d'Auzac, J. and Jacob, J.L. 1969. Regulation of glycolysis in latex of *Hevea brasiliensis*. *J. Rubb. Res. Inst. Malaya*, 21: 417-444.
- d'Auzac, J., Sanier, C. and Chrestin, H. 1986. Study of a NADH-quinone-reductase producing toxic oxygen from *Hevea* latex. *Proc. Int. Rubb. Conf. 1985 Kuala Lumpur*, Vol. III: 102-126.
- De Corres, L.F., Moneo, I., Munoz, D., Bernaola, G., Fernandez, E., Audicana, M. and Urrutia, I. 1993. Sensitization from chestnut and banana in patients with urticaria and anaphylaxis from contact with latex. *Ann. Allergy*, 70: 35-39.
- Dennis, M.S., Henzel, W.J., Bell, J., Kohr, W. and Light, D.R. 1989. Amino acid sequence of rubber elongation factor protein associated with rubber particles in *Hevea* latex. *J. Biol. Chem.*, 264: 18618-18626.
- Dennis, M.S. and Light, D.R. 1989. Rubber elongation factor from *Hevea brasiliensis*. Identification, characterization, and role in rubber biosynthesis. *J. Biol. Chem.*, 264: 18608-18617.
- de Silva, H.D., Sutherland, M.F., Suphiogh, C., McLellan, S.C., Slater, J.E., Rolland, J.M. and O'Hehir, R.E. 2000. Human T-cell epitopes of the latex allergen Hev b 5 in health care workers. *J. Allergy Clin. Immunol.*, 105: 1017-1024.
- Dickenson, P.B. 1963. In *The Chemistry and Physics of the Rubber-Like Substances* (Bateman, L. ed.), Maclaren and Sons Ltd., London, p. 43.
- Dickenson, P.B. 1965. The ultrastructure of the latex vessel of *Hevea brasiliensis*. *Proc. Nat. Rubb. Prod. Res. Assoc. Jubilee Conf. 1964 Cambridge*, 52-66.

- Dickenson, P.B. 1969. Electron microscopical studies of latex vessel system of *Hevea brasiliensis*. *J. Rubb. Res. Inst. Malaya*, 21: 543-559.
- Dolen, W.K., Williams, P.B., Koepke, J.W. and Selner, J.C. 1992. Laboratory evaluation of a commercial immunoassay for latex-specific IgE [Abstract]. *J. Allergy Clin. Immunol.*, 89: 224.
- Dunbar, B.S. and Schwoebel, E.D. 1990. Preparation of polyclonal antibodies. In *Methods in Enzymology*, Vol. 182 (Deutscher, M.P., ed.), Academic Press, New York, pp. 663-670.
- Dupont, J., Moreau, F., Lance, C. and Jacob, J-L. 1976. Phospholipid composition of the membrane of lutoids from *Hevea brasiliensis* latex. *Phytochemistry*, 15: 1215-1217.
- Engvall, E. and Perlman, P. 1971. Enzyme-linked immunosorbent assay (ELISA), Quantitative assay of immunoglobulin G. *Immunochem.* 8: 871.
- Findlay, J.B. 1990. Purification of membrane proteins. In *Protein Purification Application, A Practical Approach* (Harris, E.L.V. and Angal, S. eds.), Oxford University Press, Oxford, pp. 59-82.
- Fink, J.N. and Kelly, K.J. 1994. Latex hypersensitivity, An emerging problem. *ACI Int.*, 6: 4-6.
- Folch, J. and Lees, M. 1951. Proteolipides, a new type of tissue lipoproteins: Their isolation from brain. *J. Biol. Chem.*, 191: 807-817.
- Forstrom, L. 1980. Contact urticaria from latex surgical gloves. *Contact Dermatitis*, 6: 33-34.
- Frey-Wyssling, A. 1929. Microscopic investigation on the occurrence of resins in *Hevea* latex. *Arch. v.d. Rubberc.*, 13:392.
- Frosch, P.J., Wahl, R., Bahmer, F.A. and Maasch, H.J. 1986. Contact urticaria to rubber glove is IgE-mediated. *Contact Dermatitis*, 14: 241-245.

- Fuchs, T., Spitzauer, S., Vente, C., Hevler, J., Kapiotis, S., Rumpold, H., Kraft, D. and Valenta, R. 1997. Natural latex, grass pollen, and weed pollen share IgE epitopes. *J. Allergy Clin. Immunol.*, 100: 356-364.
- Gazeley, K.F., Gorton, A.D.T. and Pendle, T.D. 1988. Latex concentrates: properties and composition. In *Natural Rubber Science and Tecnology* (Roberts, A.D. ed.), Oxford University Press, New York, pp. 63-98.
- Gerber, A.C., Jorg, W., Zbinden, S., Seger, R.A. and Dangel, P.H. 1989. Severe intraoperative anaphylaxis to surgical gloves: Latex allergy, an unfamiliar condition. *Anesthesiology*, 71: 800-802.
- Graham, L.S. and Sticklen, M.B. 1994. Plant chitinases. *Can. J. Bot.*, 72: 1057-1083.
- Granady, L.C. and Slater, J.E. 1995. The history and diagnosis of latex allergy. In *Immunology and Allergy Clinics of North America: Latex Allergy* (Fink, J.N. ed.), W.B. Saunder, Philadelphia, 15: 21-29.
- Gomez, J.B. and Moir, G.K.J. 1979. The ultracytology of latex vessels in *Hevea brasiliensis*. Monograph No. 4. Malaysian Rubber Research and Development Board, Kuala Lumpur.
- Gomez, J.B. and Samsidar Hamzah. 1989. Frey-Wyssling complex in *Hevea* latex – Uniqueness of the organelle. *J. nat. Rubb. Res.*, 4: 75-85.
- Gomez, J.B. and Southorn, W.A. 1969. Studies on lutoid membrane ultrastructure. *J. Rubb. Res. Inst. Malaya*, 21: 513-523.
- Gomez, J.B. and Yip, E. 1974. Microhelices in *Hevea* latex: their isolation and electron microscopy. *Proc. Symp. Inst. Rubb. Res. Dev. Board 1974 Cochín*, Part I.
- Gomez, J.B. and Yip, E. 1975. Microhelices in *Hevea* latex. *L. Ultrastructure Res.*, 52: 76.

- Gomez, J.B. and Yip, E. 1976. Microhelices in *Hevea* latex: their isolation and electron microscopy. *Rubber Board Bull. India*, 13: 14.
- Gorton, A.D.T. and Pendle, T.D. 1986a. Properties and processability of HA latices. *J. nat. Rubb. Res.*, 1: 122.
- Gorton, A.D.T. and Pendle, T.D. 1986b. Processability of HA-TZ latices in relation to their properties. *Proc. Int. Rubb. Conf. 1985 Kuala Lumpur*, Vol. 2: 468-486.
- Hadjiliadis, D., Khan, K. and Tarlo, S.M. 1995. Skin test responses to latex in an allergy and asthma clinic. *J. Allergy Clin. Immunol.*, 96: 431-432.
- Hamilton, R.G., Peterson, E.L., and Ownby, D.R. 2002. Clinical and laboratory-based methods in the diagnosis of natural rubber latex allergy. *J. Allergy Clin. Immunol.*, 110: S47-S56.
- Hasma, H. 1987. Proteolipids of natural rubber particles. *J. nat. Rubb. Res.*, 2: 129-133.
- Hasma, H. 1992. Proteins of natural rubber latex concentrate. *J. nat. Rubb. Res.*, 7: 101-112.
- Hasma, H. 1994. Proteins in natural rubber latex. *Proc. IRTC'93 Wkshop on Latex Proteins, Kuala Lumpur*, 27-31.
- Hasma, H. and Amir-Hashim, M.Y. 1997. Changes to NR latex proteins on processing the latex to its products. *J. nat. Rubb. Res.*, 12: 21-32.
- Hasma, H., Shahnaz, M., Yip, E., Azizah, M., Mok, K.L. and Nasuruddin, B.A. 1997. Binding patterns of IgE antibodies in sera of rubber tappers to fresh *Hevea* latex serum proteins. *Int. Rubb. Conf. 1997 Kuala Lumpur (Full Texts)*, 360-366.
- Hasma, H. and Subramaniam, A. 1978. The occurrence of a furanoid fatty acid in *Hevea brasiliensis* latex. *Lipids*, 13: 905.

- Hemann, S., Nikolaizik, W.H., Schoni, M.H. 1998. Differential IgE recognition of recombinant *Aspergillus fumigatus* allergens by cystic fibrosis patients with allergic bronchopulmonary aspergillosis or *Aspergillus* allergy. *Eur. J. Immunol.*, 28: 1155-1160.
- Ho, C.C., Subramaniam, A. and Yong, Y.M. 1976. Lipids associated with the particles in *Hevea* latex. *Proc. Int. Rubb. Conf. 1975 Kuala Lumpur*, Vol.II: 441-456.
- Jacob, J-L., Nouvel, A. and Prevot, J.C. 1978. Electrophorese et mise en evidence d' *Hevea brasiliensis*. *Rev. Gen. Caoutch. Plastiq.*, 582: 87.
- Jaeger, D., Kleinhans, D., Cruppon, A.B. and Baur, X. 1992. Latex-specific proteins causing immediate-type cutaneous, nasal, bronchial, and systemic reactions. *J. Allergy Clin. Immunol.*, 89: 759-768.
- Jekel, P.A., Hartmann, B.H. and Beintema, J.J. 1991. The primary structure of hevamine, an enzyme with lysozyme/chitinase activity from *Hevea brasiliensis* latex. *Eur. J. Biochem.*, 200: 123-130.
- John, C.K. 1974. A novel method of stabilizing *Hevea* latex. *J. Rubb. Res. Inst. Malaysia*, 24: 111-117.
- John, C.K., Nadarajah, M., Rama Rao, P.S., Lau, C.M. and Ng, C.S. 1976. A composite preservation system for *Hevea* latex. *Proc. Int. Rubb. Conf. 1975 Kuala Lumpur*, Vol. IV: 339-357.
- John, C.K., Wong, N.P., Chin, H.C., Rama Roa, P.S. and Abdul Latiff. 1986. Further development in *Hevea* latex preservation. *Proc. Int. Rubb. Conf. 1985 Kuala Lumpur*, Vol. II: 451-467.
- Johnson, B.D., Kurup, V.P., Sussman, G.L., Arif, S.A.M., Kelly, K.J., Beezhold, D.H. and Fink, J.N. 1999. Purified and recombinant latex proteins stimulate peripheral blood lymphocytes of latex allergic patients. *Int. Arch. Allergy Immunol.*, 120: 270-279.

- Jurado, C.W. and Mayhan, K.G. 1985. Natural higher fatty acid soaps in natural rubber concentrate and their effect on other latex variables. *A.C.S. Rubb. Div. Mtg.*, Los Angeles, California.
- Kaczmarek, R.G., Silverman, B.G., Gross, T.P., Hamilton, R.G., Kessler, E., Arrowsmith-Lowe, J.T. and Moore, E. 1996. Prevalence of latex-specific IgE antibodies in hospital personnel. *Ann. Allergy Asthma Immunol.*, 76: 51-56.
- Kanitpong, K., Banerjee, B., Kurup, V., Castillo, L., Fink, J. and Kelly, K. 2000. Unique and shared IgE epitopes of Hev b 1 and Hev b 3 for patients with latex hypersensitivity [Abstract]. *J. Allergy Clin. Immunol.*, 105: S240.
- Karunakaran, A., Moir, G.F.J. and Tata, S.J. 1961. The proteins of *Hevea* latex: Ion exchange chromatography and starch gel electrophoresis. *Proc. Nat. Rubb. Res. Conf. 1960 Kuala Lumpur*, 798-808.
- Kelly, K.J., Kurup, V., Zacharisen, M., Resnick, A. and Fink, J.N. 1993. Skin and serologic testing in the diagnosis of latex allergy. *J. Allergy Clin. Immunol.*, 91: 1140-1145.
- Kujala, V.H., Pirila, T., Kurup, V.P. and Reijula, K.E. 1996. Nasal challenge, skin tests, and serum antibodies in the diagnosis of latex-induced occupational rhinitis. *Am. J. Rhinol.*, 10: 67-72.
- Kwittken, P.L., Pawlowski, N.A., Douglas, S.D. and Campbell, D.E. 1992. Measurement of human IgE to natural latex proteins: Comparison of flow cytometry and enzyme-linked immunosorbent assays (ELISA) [Abstract]. *J. Allergy Clin. Immunol.*, 89: 225.
- Laemmli, U.K. 1970. Cleavage of structural proteins during the assembly of the head of bacteriophage T4. *Nature*, 227: 680-685.
- Lagier, F., Badier, M., Marigny, J., Charpin, D. and Vervloet, D. 1990. Latex as aeroallergen. *Lancet*, 336: 516-517.

- Lavaud, F., Prevost, A., Cossart, C., Guerin, L., Bernard, J. and Kochman, S. 1995. Allergy to latex, avocado pear, and banana: Evidence for a 30 kD antigen in immunoblotting. *J. Allergy Clin. Immunol.*, 95: 557-564.
- Lee, H-I., Broekaert, W. and Raikhel, N. 1991. Co- and Post-translational processing of the hevein preproprotein of latex of the rubber tree (*Hevea brasiliensis*). *J. Biol. Chem.*, 266: 15944-15948.
- Leynadier, F. and Dry, J. 1991. Allergy to latex. *Clin. Rev. Allergy*, 9: 371.
- Leynadier, F., Pecquet, C. and Dry, J. 1989. Anaphylaxis to latex during surgery. *Anaesthesia*, 44: 547-550.
- Liss, G.M. and Sussman, G.L. 1999. Latex sensitization: occupational versus general population prevalence rates. *Am. J. Ind. Med.*, 35: 196-200.
- Lowry, O.H., Rosebrough, N.J., Farr, A.L. and Randall, R.J. 1951. Protein measurement with the Folin phenol reagent. *J. Biol. Chem.*, 193: 265-275.
- Lu, L.J., Kurup, V.P., Hoffman, D.R., Kelly, K.J., Murali, P.S. and Fink, J.N. 1995. Characterization of a major latex allergen associated with hypersensitivity in spina bifida patients. *J. Immunol.*, 155: 2721-2728.
- Lynen, F. 1967. Biosynthesis pathways from acetate to natural products. *Pure Appl. Chem.*, 14: 137.
- Madge, E.W., Collier, H.M. and Peel, J.D. 1950. Treatment of abnormal latexes. *Tran. Inst. Rubb. Ind.*, 26: 305-312.
- Makinen-Kiljunen, S. 1994. Banana allergy in patients with immediate-type hypersensitivity to natural rubber latex: Characterization of cross-reacting antibodies and allergens. *J. Allergy Clin. Immunol.*, 93: 990-996.

- Makinen-Kiljunen, S., Turjanmaa, K., Palosuo, T. and Reunala, T. 1992. Characterization of latex antigens and allergens in surgical gloves and natural rubber by immunoelectrophoretic methods. *J. Allergy Clin. Immunol.*, 90: 230-235.
- Mathew, S.N., Melton, A., Wagner, W. and Battisto, J.R. 1992. Latex hypersensitivity: prevalence among children with spina bifida and immunoblotting identification of latex proteins [Abstract]. *J. Allergy Clin. Immunol.*, 89: 225.
- McMullen, A.I. and McSweeney, G.P. 1966. The biosynthesis of rubber: incorporation of isopentyl pyrophosphate into purified rubber particles by a soluble latex enzyme. *Biochem. J.*, 101: 42.
- Meding, B. and Fregert, S. 1984. Contact urticaria from natural latex gloves. *Contact Dermatitis*, 10: 52-53.
- Metcalf, C.R. 1967. Distribution of latex in plant kingdom. *Econ. Bot.*, 21: 115.
- Miao, Z. and Gaynor, J.J. 1993. Molecular cloning, characterization and expression of Mn-superoxide dismutase from the rubber tree (*Hevea brasiliensis*). *Plant Mol. Biol.*, 23: 267-277.
- Mikkola, J., Alenius, H., Turjanmaa, K., Palosuo, T. and Reunala, T. 1997. Molecular identification of cross-reacting allergens in natural rubber latex and banana [Abstract]. *J. Allergy Clin. Immunol.*, 99 (suppl.): 342.
- Moir, G.F.J. 1959. Ultracentrifugation and staining of *Hevea* latex. *Nature*. 184: 1626-1628.
- Moir, G.F.J. and Tata, S.J. 1960. The proteins of *Hevea brasiliensis* latex. The soluble proteins of bottom fraction. *J. Rubb. Res. Inst. Malaya*, 16: 155-165.



- Moneret-Vautrin, D.A., Beaudouin, E., Widmer, S., Mouton, C., Kanny, G., Prestat, F., Kohler, C. and Feldmann, L. 1993. Prospective study of risk factors in natural rubber latex hypersensitivity. *J. Allergy Clin. Immunol.*, 92: 668-677.
- Morales, C., Basomba, J., Carreira, J. and Sastre, A. 1989. Anaphylaxis produced by rubber glove contact. Case reports and immunological identification of the antigens involved. *Clin. Exp. Allergy*, 19: 425-430.
- Moreau, F., Jacob, J-L., Dupont, J. and Lance, C. 1975. Electron transport in the membrane of lutoids from the latex of *Hevea brasiliensis*. *Biochim. Biophys. Acta*, 396: 116-124.
- M'Raihi, L., Charpin, D., Pons, A., Bongrand, P. and Vervloet, D. 1991. Cross-reactivity between latex and banana. *J. Allergy Clin. Immunol.*, 87: 129-130.
- Murakami, M., Ozawa, Y. and Funahashi, S. 1963. *J. Biochem. Tokyo*, 54: 166-172.
- Murali, P.S., Kelly, K.J., Fink, J.N. and Kurup, V.P. 1994. Investigation into the cellular immune responses in latex allergy. *J. Lab. Clin. Med.*, 124: 638-643.
- Nel, A. and Gujuluva, C. 1998. Latex antigens: identification and use in clinical and experimental studies, including crossreactivity with food and pollen allergens. *Ann. Allergy Asthma Immunol.*, 81: 388-396.
- Nguyen, D.H., Burns, M.W., Shapiro, G.G., Mayo, M.E., Murrey, M. and Mitchell, M.E. 1991. Intraoperative cardiovascular collapse secondary to latex allergy. *J. Urol.*, 146: 571-574.
- Nieto, A., Mazon, A., Estornell, F., Boquete, M., Carballada, F., Martinez, A., Asturias, J.A., Aguirre, M., Martinez, J. and Palacios, R. 1998. Prolifin, a relevant allergen in latex allergy [abstract 856]. *J. Allergy Clin. Immunol.*, 101: S207.

- Ownby, D.R. 1995. Manifestations of latex allergy. In *Immunology and Allergy Clinics of North America: Latex Allergy* (Fink, J.N. ed.), W.B. Saunders, Philadelphia, 15: 31-43.
- Palosuo, T. 1996. Identifying and quantifying natural rubber latex protein allergens. *Proc. Int. Conf. on Latex Protein Allergy: Managing the Issues, 1996 Amsterdam*, 11-16.
- Pasitkul, P. 2001. Purification and characterization of *Hevea* latex lectin and its binding protein from latex of *Hevea brasiliensis*. Doctor of Philosophy Thesis in Biochemistry, Prince of Songkla University.
- Pecquet, C., Leynadier, F. and Dry, J. 1990. Contact urticaria and anaphylaxis to natural latex. *J. Am. Acad. Dermatol.*, 22: 631-633.
- Piddlesden, J.H. 1940. The concentration of latex by centrifugal machines. *J. Rubb. Res. Inst. Malaya*, 10: 78-107.
- Poh, W.N. 1983. Developments in Malaysian latex concentrate. *Planters' Bull.*, 177: 133-144.
- Posch, A., Chen, Z., Wheeler, C., Dunn, M.J., Raulf-Heimsoth, M. and Baur, X. 1997. Characterization and identification of latex allergens by two-dimensional electrophoresis and protein microsequencing. *J. Allergy Clin. Immunol.*, 99: 385-395.
- Raulf-Heimsoth, M., Chen, Z., Liebers, V., Allmers, H. and Baur, X. 1996. Lymphocyte proliferation response to extracts from different latex materials and to the purified latex allergen Hev b 1 (rubber elongation factor). *J. Allergy Clin. Immunol.*, 98: 640-651.
- Resing, W.L. 1955. Variability of *Hevea* latex. *Archf. Rubbercult.*, 32: 75.
- Ribaillier, D., Jacob, J-L. and d' Auzac, J. 1971. Sur certains caractères vacuolaires des lutoïdes du latex d' *Hevea brasiliensis*. *Muell. Arg. Physiol. Veg.*, 9: 423.

- Rodriguez, M., Vega, F., Garcia, M.T., Panizo, C., Laffond, E., Montalvo, A. and Cuevas, M. 1993. Hypersensitivity to latex, chestnut, and banana. *Ann. Allergy*, 70: 31-34.
- Ross, B.D., McCullough, J. and Ownby, D.R. 1992. Partial cross-reactivity between latex and banana allergens. *J. Allergy Clin. Immunol.*, 90: 409-410.
- Rozeboom, H.J., Budiani, A., Beintema, J.J. and Dijkstra, B.W. 1990. Crystallization of hevamine, an enzyme with lysozyme/chitinase activity from *Hevea brasiliensis* latex. *Mol. Biol.*, 214: 441-443.
- Rubber Research Institute of Malaya. 1963. *Rep. Rubb. Res. Inst. Malaya*, 78.
- Rubber Research Institute of Malaysia. 1980. *Rep. Rubb. Res. Inst. Malaysia*, 231.
- Rubber Research Institute of Malaysia. 1982. *Rep. Rubb. Res. Inst. Malaysia*, 43.
- Rubber Research Institute of Thailand. 2002. *Thailand Rubber Statistics*, 31.
- Sandberg, E.T., Slater, J.E., Roth, D.R. and Abramson, S.L. 1992. Rubber-specific IgE in children enrolled in a spina bifida clinic [Abstract]. *J. Allergy Clin. Immunol.*, 89: 223.
- Schagger, H. and von Jagow, G. 1987. Tricine-sodium dodecyl sulfate-polyacrylamide gel electrophoresis for the separation of proteins in the range from 1 to 100 kDa. *Anal. Biochem.*, 166: 368-379.
- Schoon, Th.G.F. and Phoa, K.L. 1956. Morphology of the rubber particles in natural latices. *Arch. v.d. Rubberc.*, 33: 195.
- Schwartz, H.A. and Zurowski, D. 1993. Anaphylaxis to latex in intravenous fluids. *J. Allergy Clin. Immunol.*, 92: 358-359.

- Senda, K., Yoshioka, H., Doke, N. and Kowakita, K. 1996. A cytosolic phospholipase A<sub>2</sub> from potato tissues appears to be patatin. *Plant Cell Physiol.*, 37: 347-353.
- Sherief, P.M. and Sethuraj, M.R. 1978. The role of lipids and proteins in the mechanism of latex vessel plugging in *Hevea brasiliensis*. *Physio. Plant*, 42: 351-353.
- Shinshi, H., Mohlen, D. and Meino, F. 1987. Regulation of plant pathogenesis related enzymes: inhibition of chitinase and chitinase mRNA accumulation in cultured tobacco tissues by auxins and cytokines. *Proc. Natl. Acad. Sci. USA*, 84: 89-93.
- Slater, J.E. 1989. Rubber anaphylaxis. *N. Engl. J. Med.*, 320: 626-631.
- Slater, J.E. 1992. Allergy reactions to natural latex. *Ann. Allergy*, 68: 203-209.
- Slater, J.E. 1994. Latex allergy [Review]. *J. Allergy Clin. Immunol.*, 94: 139-149.
- Slater, J.E., Panpore, E.F. and Ohehir, R.E. 1999. Murine B-cell and T-cell epitopes of the allergen Hev b 5 from natural rubber latex. *Mol. Immunol.*, 36: 135-143.
- Slater, J.E., Vedvick, T., Arthur-Smith, A., Trybut, D.E. and Kekwick, R.G.O. 1996. Identification, cloning, and sequence of a major allergen (Hev b 5) from natural rubber latex (*Hevea brasiliensis*). *J. Biol. Chem.*, 271: 25394-25399.
- Sondheimer, J.M., Pearlman, D.S. and Bailey, Wm.C. 1989. Systemic anaphylaxis during rectal manometry with a latex balloon. *Am. J. Gastroenterol.*, 84: 975-977.
- Southorn, W.A. 1960. Complex particles in *Hevea* latex. *Nature*, 188: 165.

- Southorn, W.A. 1961. Microscopy of *Hevea* latex. *Proc. Nat. Rubb. Res. Conf. 1960 Kuala Lumpur*, 766-776.
- Southorn, W.A. 1966. Electron microscope studies on the latex on *Hevea brasiliensis*. *Proc. 6<sup>th</sup> Int. Cong. Electron Microsc. 1966 Kyoto*, 385.
- Southorn, W.A. 1969. Physiology of *Hevea* (latex flow). *J. Rubb. Res. Inst. Malaya*, 21: 494-512.
- Southorn, W.A. and Edwin, E.E. 1968. Latex flow studies. II. Influence of lutooids on the stability and flow of *Hevea* latex. *J. Rubb. Res. Inst. Malaya*, 20: 187-200.
- Southorn, W.A. and Yip, E. 1968. Latex flow studies. III. Electrostatic considerations in the colloidal stability of fresh *Hevea* latex. *J. Rubb. Res. Inst. Malaya*, 20: 201-215.
- Sowka, S., Krebitz, M., Yusof, F., Yeang, H.Y., Scheiner, O. and Breiteneder, H. 1998. Molecular characterization of a latex allergen with sequence similarity to patatin and its expression in *Pichia Pastoris* [Abstract]. *J. Allergy Clin. Immunol.*, 101 (suppl.): S206.
- Summers, D.F. and Szewczyk, B. 1996. Elution of SDS-PAGE separated proteins from immobilon membranes for use as antigens. In *The Protein Protocols Handbook* (Walker, J.M. ed.), Humana Press, New Jersey, pp. 699-702.
- Sunderasan, E., Samsidar Hamzah, Sharifah Hamid, Ward, M.A., Yeang, H.Y. and Cardoso, M.J. 1995. Latex B-serum  $\beta$ -1,3-glucanase (Hev b II) and a component of the microhelix (Hev b IV) are major allergens. *J. nat. Rubb. Res.*, 10: 82-99.
- Sunderasan, E., Sharifah Hamid, Cardoso, M.J. and Yeang, H.Y. 1994. Allergenic proteins of *Hevea brasiliensis* latex fractions. *J. nat. Rubb. Res.*, 9: 127-130.

- Sunderasan, E. and Yeang, H.Y. 1993. Latex allergy studies; B-serum from the latex bottom fraction as a major source of immunogenic glove proteins. *J. nat. Rubb. Res.*, 8: 293-298.
- Sussman, G., Tarlo, S. and Dolovich, J. 1991. The spectrum of IgE-mediated responses to latex. *JAMA*, 265: 2844-2847.
- Swanson, M.C., Bubak, M.E., Hung, L.W., Yunginger, J.W., Warner, M.A. and Reed, C.E. 1994. Quantification of occupational latex aeroallergens in a medical center. *J. Allergy Clin. Immunol.*, 94: 445-451.
- Tarlo, S.M., Sussman, G., Contala, A. and Swanson, M.C. 1994. Control of airborne latex by use of powder-free latex gloves. *J. Allergy Clin. Immunol.*, 93: 985-989.
- Tarlo, S.M., Wong, L., Roos, J. and Booth, N. 1990. Occupational asthma caused by latex in a surgical glove manufacturing plant. *J. Allergy Clin. Immunol.*, 85: 626-631.
- Tata, S.J. 1975. A study of the proteins in the heavy fraction of *Hevea brasiliensis* latex and their possible role in the destabilisation of rubber particles. Thesis for a degree of Master Science, University Malaya, Kuala Lumpur.
- Tata, S.J. 1976. Hevein: Its isolation, purification and some structural aspects. *Proc. Int. Rubb. Conf. 1975 Kuala Lumpur*, Vol. II: 499-517.
- Tata, S.J. 1980a. Distribution of proteins between the fractions of *Hevea* latex separated by ultracentrifugation. *J. Rubb. Res. Inst. Malaysia*, 28: 77-85.
- Tata, S.J. 1980b. Studies on the lysozyme and components of microhelices of *Hevea brasiliensis* latex. Thesis for a degree of Doctor of Philosophy. University Malaya, Kuala Lumpur.

- Tata, S.J., Beintema, J.J. and Balabaskaran, S. 1983. The lysozyme of *Hevea brasiliensis* latex. Isolation, enzyme kinetics and a partial amino acid sequence. *J. Rubb. Res. Inst. Malaysia*, 31: 35.
- Tata, S. J. and Edwin, E.E. 1969. Significance of non-staining white zones in starch gel electrophoresis. *J. Rubb. Res. Inst. Malaya*, 21: 477-483.
- Tata, S.J. and Edwin, E.E. 1970. *Hevea* latex enzymes detected by zymogram technique after starch gel electrophoresis. *J. Rubb. Res. Inst. Malaya*, 23: 1.
- Tata, S.J. and Moir, G.F.J. 1964. The proteins of *Hevea brasiliensis* latex. Starch gel electrophoresis of C-serum proteins. *J. Rubb. Res. Inst. Malaya*, 18: 97-108.
- Taylor, J.S. 1993. Latex allergy. *Am. J. Contact Dermatitis*, 4: 114-117.
- Taylor, J.S. and Praditsuwan, P. 1996. Latex allergy. Review of 44 cases including outcome and frequent association with allergic hand eczema. *Arch. Dermatol.*, 132: 265-271.
- Terwisscha van Scheltinga, A.C., Henning, M. and Dijkstra, B.W. 1996. The 1.8 A resolution structure of hevamine, a plant chitinase/ lysozyme, and analysis of the conserved sequence and structure motifs of glycosyl hydrolase family 18. *J. Mol. Biol.*, 262: 243-257.
- Thakker, J.C., Xia, J-Q., Rickaby, D.A. 1999. A murine model of latex allergy induced airway hypersensitivity. *Lung*, 177: 89-100.
- Tomazic, V.J., Shampaine, E.L., Lamanna, A., Withrow, T.J., Adkinson, N.F. and Hamilton, R.G. 1994. Cornstarch powder on latex products is an allergen carrier. *J. Allergy Clin. Immunol.*, 93: 751-758.
- Tomazic, V.J., Withrow, T.J. and Hamilton, R.G. 1995. Characterization of the allergen(s) in latex protein extracts. *J. Allergy Clin. Immunol.*, 95: 635-642.

- Towbin, H., Staehelin, T. and Gordon, J. 1979. Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: Procedure and some applications. *Proc. Natl. Acad. Sci. USA*, 76: 4350-4354.
- Turjanmaa, K. 1994. Update on occupational natural rubber latex allergy. *Dermatol. Clin.*, 12: 561-567.
- Turjanmaa, K. 1987. Incidence of immediate allergy to latex gloves in hospital personnel. *Contact Dermatitis*, 17: 270-275.
- Turjanmaa, K. 1988. Glove contact urticaria. Thesis, University of Tampere.
- Turjanmaa, K., Alenius, H., Makinen-Kiljunen, S., Palosuo, T and Reunala, T. 1994. Commercial skin prick test preparations in the diagnosis of rubber latex allergy [Abstract]. *J. Allergy Clin. Immunol.*, 93: 299.
- Turjanmaa, K., Alenius, H., Makinen-Kiljunen, S., Reunala, T. and Palosuo, T. 1996a. Natural rubber latex allergy [Review article]. *Allergy*, 51: 593-602.
- Turjanmaa, K., Cacioli, P., Thompson, R., Simlote, P. and Lopez, M. 1995a. Frequency of natural rubber latex allergy among US operating room nurses using skin prick testing [Abstract]. *J. Allergy Clin. Immunol.*, 95: 214.
- Turjanmaa, K., Laurila, K., Makinen-Kiljunen, S. and Reunala, T. 1988a. Rubber contact urticaria. Allergic properties of 19 brands of latex gloves. *Contact Dermatitis*, 19: 362-367.
- Turjanmaa, K., Makinen-Kiljunen, S., Alenius, H., Reunala, T. and Palosuo, T. 1996b. *In vivo* and *in vitro* evaluation of allergenicity of natural rubber latex (NRL) gloves used in health care: A nation-wide study [Abstract]. *J. Allergy Clin. Immunol.*, 97: 325.



- Turjanmaa, K., Makinen-Kiljunen, S., Reunala, T., Alenius, H. and Palosuo, T. 1995b. Natural rubber latex allergy- the European experience. In *Immunology and Allergy Clinics of North America: Latex Allergy* (Fink, J.N. ed.), W.B. Saunders, Philadelphia, 15: 71-88.
- Turjanmaa, K. and Reunala, T. 1989. Condoms as a source of latex allergen and cause of contact urticaria. *Contact Dermatitis*, 20: 360-364.
- Turjanmaa, K., Rasanen, L., Lehto, M., Makinen-Kiljunen, S. and Reunala, T. 1989. Basophil histamine release and lymphocyte proliferation tests in latex contact urticaria. *Allergy*, 44: 181-186.
- Turjanmaa, K., Reunala, T. and Rasanen, L. 1988b. Comparison of diagnostic methods in latex surgical glove contact urticaria. *Contact Dermatitis*, 19: 241-247.
- Valenta, R., Duchene, M., Ebner, C., Valent, P., Sillaber, C., Deviller, P., Ferreira, F., Tejkl, M., Edelmann, H., Kraft, D. and Scheiner, O. 1992. Prolifins constitute a novel family of functional plant pan-allergens. *J. Exp. Med.*, 175: 377-385.
- Vallier, P., Balland, S., Harf, R., Valenta, R. and Deviller, P. 1995. Identification of profilin as an IgE-binding component in latex from *Hevea brasiliensis*: clinical implication. *Clin. Exp. Allergy*, 25: 332-339.
- Venek-Krebitz, M., Sowka, S., Hsieh, L.S., Scheiner, O. and Breiteneder, H. 1997. Molecular characterization and purification of conserved pollen and food allergens in avocado (*Persea americana*) [Abstract]. *J. Allergy Clin. Immunol.*, 99 (suppl.): 479.
- Walujuno, K., Scholma, R.A., Beintema, J.J., Mariono, A. and Hahn, A.M. 1976. Amino acid sequence of hevein. *Proc. Int. Rubb. Conf. 1975 Kuala Lumpur*, Vol. 2: 518-531.
- Wiresum, L.K. 1957. Enkele latex problemen. *Vakbl. Biol.*, 3: 17.

- Wititsuwannakul, R., Wititsuwannakul, D. and Suwanmanee, P. 1990. 3-Hydroxyl-3-methyl-glutaryl coenzyme A reductase from the latex of *Hevea brasiliensis*. *Phytochem.*, 29: 1401-1403.
- Wrangsjo, K., Wahlberg, J.E. and Axelson, I.G.K. 1988. IgE-mediated allergy to natural rubber in 30 patients with contact urticaria. *Contact Dermatitis*, 19: 264-271.
- Woo, C.H. 1973. Rubber coagulation by enzymes of *Hevea brasiliensis* latex. *J. Rubb. Res. Inst. Malaysia*, 23: 323-331.
- Xia, J-Q., Rickaby, D.A., Kelly, K.J., Choi, H., Dawson, C.A. and Kurup, V.P. 1999. Immune response and airway reactivity in wild and IL-4 knockout mice exposed to latex allergens. *Int. Arch. Allergy Immunol.*, 118: 23-29.
- Yagami, T., Sato, M., Nakamura, A. and Shono, M. 1995. One of the rubber latex allergens is a lysozyme. *J. Allergy Clin. Immunol.*, 96: 677-686.
- Yassin, M.S., Lierl, M.B., Fischer, T.J., O'Brien, K., Cross, J. and Steinmetz, C. 1994. Latex allergy in hospital employees. *Ann. Allergy*, 72: 245-249.
- Yeang, H.Y., Cheong, K.F., Sunderasan, E., Hamzah, S., Chew, N.P., Hamid, S., Hamilton, R.G. and Cardoso, M.J. 1996. The 14.6 kd rubber elongation factor (Hev b 1) and 24 kd (Hev b 3) rubber particle proteins are recognized by IgE from patients with spina bifida and latex allergy. *J. Allergy Clin. Immunol.*, 98: 628-639.
- Yeang, H.Y., Ghandimathi, H. and Paranjothy, H. 1977. Protein and enzyme variation in some *Hevea* cultivars. *J. Rubb. Res. Inst. Malasia*, 25: 9-18.
- Ylitalo, L., Turjanmaa, K. and Reunala, T. 1996. Natural rubber latex (NRL) allergy in food allergic children [Abstract]. *J. Allergy Clin. Immunol.*, 97: 321.

Yunginger, J.W., Jones, R.T., Fransway, A.F., Keiso, J.M., Warner, M.A. and Hunt, L.W. 1994. Extractable latex allergens and proteins in disposable medical gloves and other rubber products. *J. Allergy Clin. Immunol.*, 93: 836-842.