

Publications of Jussi Tammisola

- Approximately 100 popular science articles about genetics, botany, plant breeding and biotechnology in newspapers and magazines (mainly in Finnish), e.g.:

Tammisola J (2005-). Plants, Breeding and Gene Technology. Information reservoir for green biotechnology (mainly in Finnish). University of Helsinki, www.geenit.fi

Tammisola J (2008). Bt Rice Is A Good Neighbor. AgBioView Jan. 6, 2009 (3 p., pdf 19 Kb), www.geenit.fi/AgBioV060109.pdf

Tammisola J (2006). Natural Romanticism Only Yields Need and Misery, AgBioView Nov. 27, 2006 (4 p., pdf 20 Kb) www.geenit.fi/AgBioView271106.pdf

- Strategic and legislative publications:

Tammisola J et. al. (2008). Government draft proposal for a law on genetically-modified plant production and the coexistence of genetically-modified agricultural production, conventional agricultural production, and natural agricultural production. Aug. 20, 2008 (18 p., pdf),
<http://ec.europa.eu/enterprise/tris/pisa/cfcontent.cfm?vFile=120080309EN.DOC>

Tammisola J et. al. (2005). Mid-term Report on Coexistence. Ministry of Agriculture and Forestry, May 31, 2005 (88 p., pdf 1.45 Mb),
http://wwwb.mmm.fi/julkaisut/tyoryhmamuistiot/2005/trm2005_9a.pdf

Tammisola J et. al. (2003). Gene Technology Strategy and Action Plan of the Ministry of Agriculture and Forestry 2003-2007. Working Group Memorandum 2003:18. Ministry of Agriculture and Forestry, Finland (42 p., pdf)
http://wwwb.mmm.fi/julkaisut/tyoryhmamuistiot/2003/trm2003_18_en.pdf
- In revision (for 2009-2012).

- Scientific publications:

Ritala A, Nuutila AM, Salmenkallio-Marttila M, Aspegren K, Aikasalo R, Kurtén U, Tammisola J, Teeri TH, Mannonen L, Kauppinen V (2003). Transgenic Barley - from the laboratory to the field. In: Plant Genetic Engineering Vol 4 Improvement of Commercial Plants II (Eds Jainwal P K and Singh R P). Sci-Tech Publishing LLC, Houston, USA. pp 103-130.

Nuutila AM, Ritala A, Salmenkallio-Marttila M, Aspegren K, Aikasalo R, Kurtén U, Tammisola J, Teeri TH, Mannonen L, Kauppinen V (2002). Improvement of malting quality of barley by complementing the malt enzyme spectrum. Phytochem. Rev. 1: 135-140.

Ritala A, Nuutila AM, Aikasalo R, Kauppinen V, Tammisola J (2002). Measuring gene flow in the cultivation of transgenic barley. Crop Science 42(1): 278-285,
<http://crop.scijournals.org/cgi/reprint/42/1/278.pdf>

Nuutila AM, Ritala A, Salmenkallio-Marttila M, Aspegren K, Aikasalo R, Kurtén U, Tammisola J, Teeri TH, Mannonen L, Kauppinen V (2001). Improvement of malting quality of

barley by complementing the malt enzyme spectrum. Plant Biotechnology - Better Products from Better Plants. Helsinki 10-13 June 2001, 18-19.

Nuutila AM, Aikasalo R, Ritala A, Kauppinen V, Tammisola J (2000). Risk assessment of transgenic barley: Estimates of transgene flow by pollen dispersal. 8th Int. Barley Genetics Symp., Adelaide, 22-27 Oct. 2000. Barley Genetics VIII. Logue, S. (Ed.). Vol. I, 199-201.

Nuutila AM, Aikasalo R, Ritala A, Kauppinen V, Tammisola J (2000). Risk assessment of transgenic barley. Int. Congr. Innovation in the barley-malt-beer chain, Nancy, 16-17 Oct. 2000, 146-150.

Ritala A, Nuutila AM, Aikasalo R, Kauppinen V, Tammisola J (2000). Transgenic barley in the field-probability of transgene flow. EC-COST 828 Seed science in the field of genetically controlled stress physiology. WG2 Meeting, Edinburgh, 9-11 June 2000, 29.

Ritala A, Nuutila AM, Aikasalo R, Kauppinen V, Tammisola J (1999). Risk assessment studies in the cultivation of transgenic barley. 2nd Eur. Symp. Enzymes in grain processing (ESEPG-2), Helsinki 8-10 Dec. 1999. Simoinen, T. & Tenkanen, M. (Eds). Espoo: VTT, 2000. VTT Symposium 207, 133-139.

Nuutila AM, Ritala A, Aikasalo R, Kauppinen V, Tammisola J (1999). Risk assessment in cultivation of transgenic barley. Int. Symp. Plant genetic engineering: Towards the Third Millennium, Havana, 6-10 Dec. 1999, 243.

Ritala A, Aikasalo R, Kauppinen V, Tammisola J (1999). Risk assessment in cultivation of transgenic barley. Espoo 1999. Nordtest, NT Techn. Report 410. 7 p. NT Project No. 1376-98.

Ritala A, Nuutila AM, Mannonen L, Aikasalo R, Tammisola J, Skadsen R, Kauppinen V, Oksman-Caldentey K-M (1998). Transgenic malting barley - research and reality. 37. Mälzereitechnische Arbeitstagung, Doemens, 20-22 Okt. 1998. 10 p.

Pirinen H., Dalman P, Kärenlampi S, Tammisola J, Kokko H (1998). Description of three new arctic bramble cultivars and proposal for cultivar identification. *Agric. Food Sci. Finl.* 7: 455-468.

Ritala A, Nuutila AM, Aikasalo R, Tammisola J, Skadsen R, Kauppinen V, Mannonen L (1998). Genetic engineering of malting barley - research and reality. Proc. 5th Aviemore Conf. Malting, Brewing and Distilling, Aviemore, 25-28 May 1998. Campbell, I. (Ed.). London: Institute of Brewing, 1999, 35-45.

Tammisola J, Aikasalo R, Ritala A, Sahramaa M, Kauppinen V (1998). Transgene flow in barley cultivation. *Proc. 2nd Int. CCRO Workshop* on Past, Present and Future considerations in Risk Assessment when using GMO's. Noordwijkerhout, the Netherlands, 5-6 Mar. 1998.

Mannonen L, Ritala A, Nuutila AM, Kurtén U, Aspegren K, Teeri TH, Aikasalo R, Tammisola J, Kauppinen V (1997). Thermotolerant fungal glucanase in malting barley. *Proc. 26th Congr. Eur. Brew. Conv.*, Maastricht 1997, p.91-99.

Mannonen L, Ritala A, Nuutila AM, Kurtén U, Aspegren K, Teeri TH, Aikasalo R, Tammisola J, Kauppinen V (1997). Thermotolerant fungal glucanase in malting barley. Proc. 26th Congr. Eur. Brew. Conv., Maastricht, 24-29 May 1997, 91-100.

Home S, Williamson A, Tammisola J, Husman J (1997). Natural variation among barley kernels. *J. Am. Soc. Brew. Chem.* 55: 47-51.

Regina M, Lapinjoki SP, Kauppinen V, Tammisola J (1996). Identification of microsatellites in white birch (*Betula pendula*) and their use as genetic markers. Vth Nordic Genome Initiative Workshop, The Nordic Council of Ministers, Laugarvatn, Iceland, June 14-17, 1996, 4 p.

Regina M, Lapinjoki S, Tammisola J, Kauppinen V (1995). Simple Sequence Repeats in White Birch (*Betula pendula* Roth). Plant Genome IV, Abstracts of the Int. Conf. on the Status of Plant Genome Research, San Diego, CA, USA, Jan. 14-18 1996. New York, NY, Scherago International Inc. P 52.

Åkerman S, Tammisola J, Regina M, Kauppinen V, Lapinjoki S (1996). Segregation of AFLP markers in *Betula pendula* (Roth). *Forest Genetics* 3: 117-123.

Sjöholm K, Tenhunen J, Tammisola J, Pietilä K, Home S (1996). Determination of the fermentability and extract content of industrial worts by NIR. *J. Am. Soc. Brew. Chem.* 54 (3): 135-140.

Haikara A, Tammisola J, Juvonen R (1995). Detection of osmotolerant yeasts in syrup by direct/indirect impedance and bioluminescence. Abstracts of the SABA (Safety Assessment of Biotechnological Processes and Products in the Agro-food Area) workshop on Development and Performance of Rapid Techniques for Detection and Enumeration of Relevant/Industrial Micro-organisms, Chipping Campden, UK, 28-30 Sep. 1995, 3 p.

Tammisola J, Åkerman S, Regina M, Lapinjoki S, Kauppinen V (1995). Enhanced screening for contamination and parentage in breeding by applying pooling. IUFRO XX World Congress, Tampere, Finland, 6-12 Aug. 1995, S2.04-02, 2 p.

Lapinjoki S, Regina M, Tammisola J, Kauppinen V, Viherä-Aarnio A, Hagqvist R (1995). Application of DNA marker techniques to white birch, *Betula pendula*. IUFRO XX World Congress, Tampere, Finland, 6-12 Aug. 1995, S2.04-02, 5 p.

Regina M, Lapinjoki S, Tammisola J, Åkerman S, Kauppinen V (1995). Microsatellite markers for European white birch (*Betula pendula* Roth). Plant Genome III, Abstracts of the Int. Conf. on the Status of Plant Genome Research, San Diego, CA, USA, 15-19 Jan. 1995. New York, NY, Scherago International Inc. P 196.

Åkerman S, Tammisola J, Kauppinen V, Regina M, Lapinjoki S (1995). Segregation of amplified fragment length polymorphism (AFLP) markers in birch, *Betula pendula*. Plant Genome III, Abstracts of the Int. Conf. on the Status of Plant Genome Research, San Diego, CA, USA, 15-19 Jan. 1995. New York, NY, Scherago International Inc. P 136.

- Åkerman S, Tammisola J, Lapinjoki SP, Söderlund H, Kauppinen V, Viherä-Aarnio A, Regina M, Hagqvist R (1995). RAPD markers in parentage confirmation of a valuable breeding progeny of European white birch. *Can. J. Forest Res.* 25: 1070-1076.
- Tammisola J, Varhimo A, Velling P, Viherä-Aarnio A, Kauppinen V, Sundquist J, Lapinjoki S (1995). Variation in the wood and pulping properties of European white birch. *Paper and Timber* 77: 648-654.
- Lapinjoki S, Tammisola J, Mannonen L, Åkerman S, Regina M, Kauppinen V (1995). Uusien valintamenetelmien arvointi rauduskoivun jalostukseen [Evaluation of new selection methods for breeding of European white birch (*Betula pendula* Roth)]. *Suomen Akatemian julkaisuja* n:o 3 (1995), p.39-47.
- Tammisola J, Åkerman S, Regina M, Lapinjoki S, Kauppinen V (1994). Strategies of pooling for parentage analyses applying DNA markers. *Biometrics in Plant Breeding: Applications of Molecular Markers* (ed. J.W. van Ooijen & J.Jansen), p.186-194. CPRO-DLO, Wageningen, the Netherlands.
- Åkerman S, Tammisola J, Lapinjoki S, Kauppinen V (1994). Amplified fragment length polymorphisms (AFLPs) as genetic markers in *Betula pendula*. Abstracts of the 4th Workshop of the Nordic Genome Initiative: Beyond Mapping Single Genes, Helsinki, Finland 3-5 Sep. 1994. P 62.
- Kauppinen V, Lapinjoki S, Regina M, Söderlund H, Tammisola J, von Wright A, Åkerman S (1994). Method for capturing and selection of microsatellite type DNA markers. *Finnish pat. appl.* No. 94 1765.
- Tammisola J (1994). Strategies of pooling for parentage analyses applying DNA markers. Plant Genome II, Abstracts of the Second Int. Conf. on the Plant Genome, San Diego, CA, USA, 24-27 Jan. 1994. New York, NY, Scherago International Inc. P 205.
- Åkerman S, Tammisola J, Lapinjoki SP, Regina M, Söderlund H, Kauppinen V, Viherä-Aarnio A, Hagqvist R (1994). RAPD markers in parentage analysis of European white birch (*Betula pendula* Roth). Plant Genome II, Abstracts of the Second Int. Conf. on the Plant Genome, San Diego, CA, USA, 24-27 Jan. 1994. New York, NY, Scherago International Inc. P 172.
- Åkerman S, Tammisola J, Lapinjoki SP, Söderlund H, Kauppinen V, Viherä-Aarnio A, Regina M, Hagqvist R (1993). RAPD markers in parentage analysis of European white birch (*Betula pendula* Roth). Abstracts of the Third Nordic Genome Workshop, Soria Moria, Oslo, Norway, 22-24 Oct. 1993. P-52.
- Kokko H, Kärenlampi S, Rissanen E, Tammisola J, Kärenlampi L (1993). EY-markkinakelpoisten tuotteiden etsiminen ja kehittäminen: Mesimarjan uudet kannat. Raportti vuosina 1990-1992 suoritetuista tutkimuksista. [Searching and developing new products for EU market: New clones of arctic bramble. A report of studies made in 1990-1992.]. Kuopio, Finland, Univ. of Kuopio. 28 p.
- Tammisola J, Ojamo H, Kauppinen V (1993). Multigradient method for optimization of cultivation conditions in plant cell and microbial biotechnology. *Biotech. Bioeng.* 42: 1301-1310.

- Hannus R, Tammisola J, Kauppinen V (1993). Ohran RFLP-kartoitus [Summary: RFLP mapping of barley]. *Mallas ja Olut* 1993 (3): 78-82.
- Hannus R, Tammisola J, Kauppinen V (1993). Ohran RFLP-kartoitus [RFLP marker mapping in barley]. *VTT Research Notes* 1450, 27 p.
- Tammisola J, Lapinjoki SP, Åkerman S, Regina M, von Wright A, Söderlund H, Kauppinen V, Viherä-Aarnio A, Hagqvist R, Velling P (1992). Polymorphic DNA markers in clonal identification and pedigree confirmation of white birch (*Betula pendula* Roth.). Plant Genome I, Abstracts of the Int. Conf. on the Plant Genome, San Diego, CA, USA, 9-11 Nov. 1992. New York, NY, Scherago Int. Inc. P 138.
- Lapinjoki S, Tammisola J, Kauppinen V, v. Wright A, Viherä-Aarnio A, Hagqvist R, Sundquist J, Martimo T-M (1992). The Finnish project for genetic mapping and its applications in breeding, biotechnology and research of white birch. Abstracts of the Sixth Meeting of the International Conifer Biotechnology Working Group, Research Triangle Park, North Carolina, 23-28 Apr. 1992. North Carolina State Univ., 2 p.
- Lapinjoki S, Tammisola J, Kauppinen V (1992). Mikrosatelliitit rauduskoivun geenikartoituksessa [Summary: The use of microsatellites in the genetic mapping of white birch]. *Kemia-Kemi* 19(3): 232-236.
- Tammisola J (1991). DNA-markkerikartan käyttö kasvinjalostuksessa [Applications of DNA marker map in plant breeding]. *Puuvariston kasvien bioteknologia* [Biotechnology of Woody Plants], Univ. of Joensuu, 1 p.
- Tammisola J, Ojamo H, Kauppinen V (1990). More rapid optimization in plant cell culture. *Physiol. Plant.* 79(2), part 2: A4.
- Tammisola J (1988). Incompatibility classes and fruit set in natural populations of arctic bramble (*Rubus arcticus* L.) in Finland. *J. Agric. Sci. Finl.* 60: 327-446.
- Tammisola J (1988). RISTO - Guidance system for equivalence classification study. Proc. Finn. Artific. Intellig. Symp., p.283-292. Finn. Artif. Intellig. Soc., Helsinki.
- Tammisola J (1986). Populations in clonal plants. *J. Agric. Sci. Finl.* 58: 239-276.
- Tigerstedt PMA, Rudin D, Niemelä T, Tammisola J (1982). Competition and neighbouring effect in a naturally regenerating population of Scots pine. *Silva Fenn.* 16: 122-129.
- Tammisola J (1982). Principles of genetic sampling and conservation in perennial species - A case study in arctic bramble (*Rubus arcticus* L.). *Seed Regeneration in Cross-Pollinated Species* (ed. E.Porceddu & G.Jenkins), p.165-189. Balkema, Rotterdam.
- Kärenlampi L, Tammisola J, Hurme H (1975). Weight increase of some lichens as related to carbon dioxide exchange and thallus moisture. *Fennoscandian Tundra Ecosystems I* (Ed. F.E.Wielgolaski), p.135-137. Springer, Berlin.
- Kärenlampi L, Tammisola J (1970). Preliminary report on models of reindeer lichen CO₂ exchange, environment and productivity. *IBP i Norden* 5: 23-25.

Kärenlampi L, Tammisola J (1970). Ekosysteemianalyysi ja tuottavuus [Ecosystem analysis and productivity]. *Luonnon Tutkija* 4: 106-112.

Tammisola J, Ryynänen A (1970). Incompatibility in *Rubus arcticus* L. *Hereditas* 66: 269-278.

Lecture notes, EDP programs and commission reports

Tammisola J (1996). Multstk.bas: Exact multinomial test for genetical progeny distributions, VTT, Espoo, 9 p.

Tammisola J (1995). Arpokuop.bas: Versatile randomization of samples in molecular biological laboratory practice, VTT, Espoo, 23 p.

Tammisola J (1995). Bintstk.bas: Exact binomial test for genetical progeny distributions utilizing integer arithmetic and cancellation, VTT, Espoo, 6 p.

Tammisola J (1994). Binosam.bas: The distribution of the quotient of two independent binomial variables and its confidence limits applying bootstrap method, VTT, Espoo, 4 p.

Tammisola J (1996). Puuaineen laadun periytyvyys rauduskoivulla [Heritability of wood quality in European white birch], VTT Biotechnology and Food Research, 11 p.

Tammisola J (1996). DNA-merkkitekniikoiden sovellusnäkymiä kasveilla [Application prospects of DNA-marker techniques in plants], VTT Biotechnology and Food Research, 11 p.

Tammisola J (1995). Siirtogenisten kasvien riskinarvointi [Risk assessment of transgenic plants], VTT Biotechnology and Food Research, 14 p.

Tammisola J (1991). Markkerien käyttö kasvinjalostuksessa [The use of genetic markers in plant breeding], VTT Biotechnical Laboratory, 15 p.

Tammisola J (1990). Optimointi kasvibiotekniikasta [Optimization in plant biotechnology], The Academy of Finland, Research Council for Agriculture and Forestry, 12 p.

Tammisola J (1990). Optimointimenetelmiä [Optimization methods], VTT, Espoo, 23 p.

Tammisola J, Tigerstedt PMA (1988). Förslag till konservering av genetiskt värdefullt förädlingsmaterial av åkerbär (*Rubus arcticus* L.) i Nordiska genbanken [Proposition for conservation of genetically valuable breeding material of arctic bramble in Nordic Gene Bank], Univ. of Helsinki, 4 p.

Tammisola J (1984). Seinälehdenkirjoitin POSTER [Program package for processing of posters], Univ. of Helsinki, 15 p.

Tammisola J (1980). Ekologinen toleranssi [Ecological tolerance], Department of Plant Breeding, Univ. of Helsinki, 22 p.

- Tammisola J (1980). Some models of competition, Department of Plant Breeding, Univ. of Helsinki, 4 p.
- Tammisola J (1978). Periytyvyys [Heritability], Department of Plant Breeding, Univ. of Helsinki, 7 p.
- Tammisola J, Nokkala S (1977). Kasvinjalostuksen sytologia [Cytology for plant breeding], Department of Plant Breeding, Univ. of Helsinki, 52 p.
- Tammisola J (1977). Algorithmic crossing system for analyzing the breeding structure of populations, Department of Plant Breeding, Univ. of Helsinki, 3 p.
- Tammisola J (1976). Tilastotieteen perusteita [Basic statistics for plant breeding], Department of Plant Breeding, Univ. of Helsinki, 36 p.
- Biotieteiden koulutustoimikunnan osamietinnöt [Reports of the Education Commission for Biosciences, Ministry of Education], I: 1976, 250 p.; II: 1977, 144 p.
- Tammisola J (1969). Perinnöllisyystieteen approbatur-kurssimoniste [Approbatur course notes in genetics], Department of Genetics, Univ. of Turku, 25 p.
- Tammisola J (1962). Kasvimaailman vuotuinen rytmi [Seasonal rhythm in plant kingdom, Selected Student Essays], Valioaineita 1962, SKS.

Helsinki, January 28, 2009
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