Attachment 1 – Multi- and Intrastate Collaborative Publications of W-2168 Members (2008-13)

State abbreviation in parentheses denotes member location

Individuals without notation are non-W-2168 members

1 = current member

2 = former member

Multi-state Collaborative Publications

Bewley JD, (CA,1)Bradford KJ, Hilhorst HWM, (OR,1)Nonogaki H (2013) Seeds: Physiology of Development, Germination, and Dormancy. Springer, NY.

Hill H, (CA,1)Bradford KJ, Cunningham J, (NY,1)Taylor AG (2008) Primed lettuce seeds exhibit increased sensitivity to moisture during aging. Acta Horticulturae 782: 135-141.

Li YC, Ren JP, Cho MJ, Zhou SM, Kim YB, (SD,1)Guo HX, Wong JH, Niu HB, Kim HK, Morigasaki S, (CA,2)Lemaux PG, Frick OL, Yin J, (CA,2)Buchanan BB**.** (2009) The level of expression of thioredoxin is linked to fundamental properties and applications of wheat seeds. Molecular Plant 2:430-441.

(FL,1)Pérez HE, Criley RA, (KY,2)Baskin CC (2008) Promoting germination in dormant seeds of Pritcharida remota (Kuntze) Beck., an endangered palm endemic to Hawaii. Natural Areas Journal 28: 251-260.

(FL,1)Pérez, H.E., L.M. Hill, and C. Walters(USDA-CO,1). (2012) An analysis of embryo development in palm: interactions between dry matter accumulation and water relations in Pritchardia remota (Arecaceae). Seed Science Research 22:97-111.

Pluskota WE, (CA,1)Bradford KJ, (OR,1)Nonogaki H (2011) Tissue printing methods for localization of RNA and proteins that control seed dormancy and germination. In: Kermode AR (ed) Seed Dormancy: Methods and Protocols, Methods in Molecular Biology. Springer, NY, pp 329-339.

Intra-state Collaborative Publications

Gama-Arachchige NS, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC (2010) Identification and characterization of the water gap in physically dormant seeds of Geraniaceae, with special reference to Geranium carolinianum L. Annals of Botany 105: 977-990.

Gama-Arachchige NS, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC (2011) Acquisition of physical dormancy and ontogeny of the micropyle-water gap complex in developing seeds of Geranium carolinianum L. (Geraniaceae). Annals of Botany 108: 51-64.

Gama-Arachchige NS, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC (2012) The autumn effect: timing of physical dormancy break in seeds of two winter annual species of Geraniaceae by a stepwise process. Annals of Botany 110:637-651.

Gomes FG, Mondo VHV, Cicero SM, (OH,2)McDonald MB, (OH,2)Bennett MA (2009) Evaluation of priming effects on sweet corn seeds by SVIS. Seed Technology 31: 95-100.

Jayasuriya KMG, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC (2009) Phylogeny of seed dormancy in Convolvulaceae, subfamily Convolvuloideae (Solanales). Annals of Botany 103: 45-63.

Jayasuriya KMG, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC (2009) A proposed mechanism of physical dormancy break in sensitive and insensitive seeds of Ipomoea lacunosa (Convolvulaceae). Annals of Botany 103: 433-445.

Jayasuriya KMG, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC (2009) Sensitivity cycling and mechanism of physical dormancy break in seeds of Ipomoea hederacea (Convolvulaceae). International Journal of Plant Sciences 170: 429-443.

Jayasuriya KMG, (KY,2)Baskin JM, (KY,1)Geneve RL, (KY,2)Baskin CC, Chien C (2008) Physical dormancy in seeds of the holoparasitic angiosperm Cuscuta australis (Convolvulaceae, Cuscuteae): Dormancy breaking requirements, anatomy of the water gap and sensitivity cycling. Annals of Botany 102: 39-48.

Mondo VHV, Gomes FG, Cicero SM, (OH,2)Bennett MA, (OH,2)McDonald MB (2012) Priming protocols on Lactuca sativa seeds evaluated by image analysis. Revista Agrarian 6: 402-409.

(FL,1)Pérez HE, (FL,2)Norcini J (2010) A new method of wiregrass (Aristida stricta Michaux.) viability testing using an enhanced forceps press test. Natural Areas Journal 30: 387-391.

(NY,2)Obendorf RL, Zimmerman AD, Ortiz PA, (NY,1)Taylor AG, Schnebly SR (2008) Imbibitional chilling sensitivity and soluble carbohydrate composition of low raffinose, low stachyose soybean seed. Crop Science 48: 2396-2403.

Rutzke CFJ, (NY,1)Taylor AG, (NY,2)Obendorf RL (2008) Influence of aging, oxygen and moisture on ethanol production from cabbage seeds. Journal of the American Society for Horticultural Sciences 133: 158-164.

Attachment 2 – Collaborative Grant Proposals (2008-12)

State abbreviation in parentheses denotes member location

1 = current member

2 = former member

(KY,1)Allan Downie, David Still, (OR,1)Hiroyuki Nonogaki, (USDA-WA,1)Camile Steber, and (CA,1)Kent Bradford submitted “Arabidopsis 2010: Collaborative Research: Regulatory networks controlling seed germination” to NSF in 2007.

(KY,1)Allan Downie, (VA,1)Greg Welbaum, and (CA,1)Kent Bradford submitted a Research Coordination Network in Biological Sciences to NSF in 2009.

(KY,1)Allan Downie and (KY,2)Sharyn Perry submitted “Arabidopsis 2010: Collaborative Research: Regulatory networks controlling seed germination” to NSF in 2009

(USDA-WA,1)Camile Steber and (OR,1)Hiroyuki Nonogaki submitted “The spatiotemporal expression pattern required for control of germination by GA” to USDA/CSREES/AFRI in 2009.

(KY,1)Allan Downie and (KY,2)Sharyn Perry submitted “Arabidopsis 2010: Collaborative Research: Regulatory networks controlling seed germination” to NSF in 2010

Attachment 3 – Other Collaborative Projects (2008-12)

State abbreviation in parentheses denotes member location

1 = current member

2 = former member

(CA,1)Kent Bradford) invited (NY,1)Alan Taylor to present his work on seed technology at a meeting of seed industry researchers at UC Davis.

(CA,1)Kent Bradfordand (USDA-CO,1)Christina Walters have consulted on studies on the relationship between seed moisture isotherms and seed longevity

(CA,1)KentBradford participated with Jerry and Carol Baskin(KY,2) and Susan Meyer in an NSF-funded project through the National Evolutionary Synthesis Center to apply population-based threshold models to seed ecology studies.

(LA,1)Cohn (LA) and (NY,1)Taylor collaborated on development of bioactive compounds to improve seed quality via QSAR analysis.

(NY,1)Alan Taylor collaborated with (CA,1)Kent Bradfordand seed industry on aging of primed lettuce

Attachment 4 – W-2168 Refereed Publications 2008-12

Agehara S, Leskovar D (2010) Optimizing foliar application of abscisic acid to improve drought tolerance of melon. HortScience 45: S50.

Agehara S, Leskovar DI (2011) Abscisic acid controls size of pepper and watermelon transplants. ASHS Annual Conference, p 105.

Agehara, S, Leskovar DI (2012) Characterizing concentration effects of exogenous abscisic acid on gas exchange, water relations, and growth of muskmelon seedlings during water stress and rehydration. Journal of the American Society for Horticultural Science (In Press).

Argyris J, Truco MJ, Ochoa O, McHale L, Dahal P, Van Deynze A, Michelmore RW, Bradford KJ (2011) A gene encoding an abscisic acid biosynthetic enzyme (LsNCED4) co-locates with the high temperature germination locus Htg6.1 in lettuce (Lactuca sp.). Theoretical and Applied Genetics 122: 95-108.

Argyris JM, Dahal P, Hayashi E, Still DW, Bradford KJ (2008) Genetic variation for lettuce seed thermoinhibition is associated with temperature-sensitive expression of abscisic acid, gibberellin and ethylene biosynthesis, metabolism and response genes. Plant Physiology 148: 926-947.

Ariizumi T, Lawrence PK, Steber CM (2011) The role of two F-box proteins, SLEEPY1 and SNEEZY, in Arabidopsis gibberellin signaling. Plant Physiology 155: 765-775.

Ariizumi T, Murase K, Sun T, Steber CM (2008) Proteolysis-independent down-regulation of DELLA repression by the gibberellin receptor GID1. The Plant Cell 20: 2447-2459

Ariizumi T, Steber CM (2011) Mutations in the F-box gene SNEEZY result in decreased Arabidopsis GA signaling. Plant Signaling and Behavior 6: 831-833.

Bang H, Davis A, Kim S, Leskovar D, King SR (2010) Flesh color inheritance and gene interactions among canary yellow, pale yellow and red watermelon. Journal of the American Society for Horticultural Sciences 135: 362-368.

Bewley JD, Bradford KJ, Hilhorst HWM, Nonogaki H (2013) Seeds: Physiology of Development, Germination, and Dormancy. Springer, NY.

Boddy, L.G., Bradford, K.J., and Fischer, A.J. (2012) Population-based threshold models describe weed germination and emergence patterns across varying temperature, moisture and oxygen conditions. Journal of Applied Ecology doi: 10.1111/j.1365-2664.2012.02206.x

Bradford KJ (2008) Shang Fa Yang: Pioneer in plant ethylene biochemistry. Plant Science 175: 2-7.

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Bradford KJ, Harada JJ (2010) Introduction to Translational Seed Biology: From Model Systems to Crop Improvement. Plant Science 179: 553.

Butcher JD, Crosby K, Leskovar DI, Jifon J, Yoo KS, Patil B (2011) Quantifying ascorbic acid, flavonoid, and capsaicin levels in different peppers (Capsicum annuum) grown in two different Texas locations. HortScience 46: S23.

Cao S, Carver BF, Zhu X, Fang T, Chen Y, Hunger RM, Yan L (2010) A single-nucleotide polymorphism that accounts for allelic variation in the Lr34 gene and leaf rust reaction in hard winter wheat. Theoretical and Applied Genetics 121: 385-392.

Carson L, Freeman J, Zhou K, Welbaum G, Reiter M (2011) Cultivar evaluation and lipid protein contents of Virginia grown edamame. HortTechnology 21: 131-135.

Chappell JH, Cohn MA (2008) Exploring recalcitrant seed death with the Spartina model system. Polish Journal of Natural Sciences Supplement 5: 75.

Chappell JH, Cohn MA (2011) Corrections for interferences and extraction conditions make a difference: use of the TBARS assay for lipid peroxidation of orthodox Spartina pectinata and recalcitrant Spartina alterniflora seeds during desiccation. Seed Science Research 21: 153-158.

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Christian EJ and Goggi A S (2008) Aromatic plant oils as fungicide for organic corn production. Crop Science 48: 1941-1951.

Chu CG, Tan CT, Zhong S, Xu SS, Yan L (2011) A novel retrotranspon inserted in the dominant Vrn-B1 allele confers spring growth habit in tetraploid wheat (Triticum turgidum L.). Genes, Genomes, and Genetics 1: 637-645.

Chun C, Lee JM, Leskovar DI, Halmer P, Wang C, Lee C (eds) (2008) Proceedings of the International Symposium on Seed Enhancement and Seedling Production Technology.

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Contreras S, Bennett MA, Tay D (2009) Temperature during seed development affects weight, germinability and storability of lettuce seeds. Seed Science and Technology 37: 398-412.

Contreras S, Bennett MA, Tay D, Metzger J (2008) Maternal light environment during seed development affects lettuce seed weight, germinability and storability. HortScience 43: 845-852.

Contreras S, Bennett MA, Tay D, Metzger J, Nerson H (2009) Red to far-red ratio during seed development affects lettuce seed germinability and storability. HortScience 44: 130-134.

Contreras S, Rabara R, Bennett MA, Tay D, McDonald MB (2008) Acquisition of germination capacity, photodormancy and desiccation tolerance in lettuce seeds. Seed Science and Technology 36: 667-678.

de Geus Y N, Goggi AS, Pollak LM (2008) Seed quality of high protein corn in organic and conventional farming systems. Agronomy for Sustainable Development 28: 541-550.

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