References

[EPPO, 2014] The Energy Policy and Planning Office (EPPO). Energy Statistics of Thailand 2013.http://www.eppo.go.th. 2014. Available at: http://www.eppo.go.th/info/cd-2013/Energy%20Statistics%20of%20Thailand%202013.pdf. Accessed June 6, 2014.

[Vasudevan*et al*., 2005] Vasudevan Padma, Sharma Satyawati and Kumar Ashwani.Liquid biofuelfrom biomass : An overview. Journal of Scientific & Industrial Research, Vol. 64, November 2005, pp. 822-831.

[Nigam and Singh, 2010] Nigam Poonam Singh and Singh Anoop. Production of liquid biofuels from renewable resources.Progress in Energy and Combustion Science, January 2010, pp. 1-17.

[Vasudevan*et al*., 2005] Vasudevan Padma, Sharma Satyawati and Kumar Ashwani. Liquid biofuel from biomass : An overview. Journal of Scientific & Industrial Research, Vol. 64, November 2005, pp. 822-831

[Chhetri*et al*., 2008] Arjun B. Chhetri 1, Martin S. Tango, Suzanne M. Budge, K. Chris Watts and M. Rafiqul Islam. Non-Edible Plant Oils as New Sources for Biodiesel Production.International Journal ofMolecular Sciences, Vol.9, January 2008, pp 169-180.

[Koh and Gazhi, 2011] May Ying Koh and TiniaIdatyMohd.Ghazi. A review of biodiesel production from *Jatrophacurcas* L. oil. Renewable and Sustainable Energy Reviews, Volume 15, Issue 5, June 2011, pp. 2240-2251.

[Garg *et al*., 2011] Preeti Garg, Pankaj Khatri and Divay Gandhi. Plant Tissue Culture of *JatrophaCurcas*L.: A review. Imperial Journal of Pharmacognosy& Natural Products, Vol.1, June 2011, pp.1-13.

[Attaya*et al*., 2012] Ahmed SaadAttaya, Danny Geelen and Abd El-Fatah HelmyBelal.Progress InJatrophaCurcas Tissue Culture. American-Eurasian Journal of Sustainable Agriculture, Vol. 6(1), 2012, pp. 6-13.

[Gu*et al*., 2012] KeyuGu, Chengxin Yi, Dongsheng Tian, Jatinder Singh Sangha, Yan Hong and Zhongchao Yin.Expression of fatty acid and lipid biosynthetic genes in developing endosperm of *Jatrophacurcas*. Biotechnology for Biofuels, Vol. 5:47, 2012, pp. 1-15.

[Li *et al*., 1999] Li, Y.G., C.L. Dewald and P.L.Sims. Genetic relationships withinTripsacumas detected by RAPD variation.Annals of Botany, Vol. 84, 1999, pp. 695–702.

[Fossil fuel, 2014] Wikipedia.Fossil fuel. 2014. Available at : http://en.wikipedia.org/wiki/Fossil_fuel . Accessed June 6, 2014.

[Biodiesel, 2014] Wikipedia.Biodiesel. 2014. Available at : http://en.wikipedia.org/wiki/BiodieselAccessed June 6, 2014.

[Koh and Ghazi, 2011] May Ying Koh and TiniaIdatyMohd.Ghazi. A review of biodiesel production from *Jatrophacurcas*L. oil. Renewable and Sustainable Energy Reviews, Vol. 15(5), June 2011, pp.2240-2251.

[Discomo and Misawa, 1995] Dicosmo, F. and M. Misawa.PLANT-CELL AND TISSUE-CULTURE - ALTERNATIVES FOR METABOLITE PRODUCTION. Biotechnology Advances,1995, Vol. 13(3), pp. 425-453.

[Kumar and Sharma, 2008] Ashwani Kumar and Satyawati Sharma. An evaluation of multipurpose oil seed crop for industrial uses (*Jatrophacurcas* L.): A review. Industrial Crops and Products. 2008, pp. 1-10.

[Kumar and Sharma, 2008] Ashwani Kumar and Satyawati Sharma. An evaluation of multipurpose oil seed crop for industrial uses (*Jatrophacurcas* L.): A review. Industrial Crops and Products. 2008, pp. 1-10.

[Kumar and Sharma, 2008] Ashwani Kumar and Satyawati Sharma. An evaluation of multipurpose oil seed crop for industrial uses (*Jatrophacurcas* L.): A review. Industrial Crops and Products. 2008, pp. 1-10.

[Chanty, 2014] Chanty.Bio Fuel Plant - JatrophaCurcas. 2014. Available at : http://1.bp.blogspot.com/-PpW-m6lqF-c/UAzvo-VnWOI/AAAAAAAAAA8/srmFA_Zab3E/s1600/Jatropha+Curcas+tree.jpg. Accessed June 6, 2014.

[Unknown, 2014] Unknown.http://www.hindawi.com/ . 2014. Available at: http://www.hindawi.com/journals/tswj/2013/827295.fig.002.jpg. Accessed June 6, 2014.

[Vossen andMkamilo, 2014] H.A.M. van der Vossen and G.S. Mkamilo. *Jatrophacur*cas L. Available at : http://www.prota4u.org/protav8.asp?h=M4,curcas&p=Jatropha+curcas. 2014. Accessed June 6, 2014.

[Levitan, 2014] Dave Levitan. *Jatrophacurcas* L.Weed to Wonder Fuel? Jatropha Draws Biofuel Investors — and Questions. Available at : http://thecostaricanews.com/weed-to-wonder-fuel-jatropha-draws-biofuel-investors-%E2%80%94-and-questions/8938. 2014. Accessed June 6, 2014.

[Seed oil,2014] Wikipedia.Seed oil. Available at : http://en.wikipedia.org/wiki/Seed_oil . 2014. Accessed June 6, 2014.

[Vegetable oil,2014] Wikipedia.Vegetable oil. Available at : http://en.wikipedia.org/wiki/Vegetable_oil .2014. Accessed June 6, 2014.

[Vegetable oil,2014] Wikipedia.Vegetable oil. Available at : http://en.wikipedia.org/wiki/Vegetable_oil .2014. Accessed June 6, 2014.

[Corn Oil Machine, 2014] Corn Oil Machine.Vegetable Oil Industry in India. Available at :http://www.indianetzone.com/24/vegetable_oil_industry_india.htm.2014. Accessed June 6, 2014.

[CliffsNotes, 2014] CriffsNotes.Organic molecules. Available at: http://www.cliffsnotes.com/sciences/anatomy-and-physiology/anatomy-and-chemistry-basics/organic-molecules. 2014. Accessed June 6, 2014.

[Knothe*et al*., 2014] Gerhard Knothe, Robert O. Dunn and Marvin O. Bagby. Biodiesel:The Use of Vegetable Oils and Their Derivatives as Alternative Diesel Fuels. Available at : http://biodiesel.org/reports/19961201_gen-162.pdf. 2014. Accessed June 6, 2014.

[The AOCS Lipid Library, 2014]The AOCS Lipid Library. Lipid Compositions of Plants and Microorganisms. 2014. Available at : http://lipidlibrary.aocs.org/Lipids/comp_plant/index.htm . Accessed June 6, 2014.

Knothe*et al*., 2014] Gerhard Knothe, Robert O. Dunn and Marvin O. Bagby. Biodiesel:The Use of Vegetable Oils and Their Derivatives as Alternative Diesel Fuels. Available at : http://biodiesel.org/reports/19961201_gen-162.pdf. 2014. Accessed June 6, 2014.

[The AOCS Lipid Library, 2014] The AOCS Lipid Library. Lipid Compositions of Plants and Microorganisms. 2014. Available at : http://lipidlibrary.aocs.org/Lipids/comp_plant/index.htm . Accessed June 6, 2014.

Knothe*et al*., 2014] Gerhard Knothe, Robert O. Dunn and Marvin O. Bagby. Biodiesel:The Use of Vegetable Oils and Their Derivatives as Alternative Diesel Fuels. Available at :http://biodiesel.org/reports/19961201_gen-162.pdf. 2014. Accessed June 6, 2014.

Knothe*et al*., 2014] Gerhard Knothe, Robert O. Dunn and Marvin O. Bagby. Biodiesel:The Use of Vegetable Oils and Their Derivatives as Alternative Diesel Fuels. Available at : http://biodiesel.org/reports/19961201_gen-162.pdf. 2014. Accessed June 6, 2014.

Knothe*et al*., 2014] Gerhard Knothe, Robert O. Dunn and Marvin O. Bagby. Biodiesel: The Use of Vegetable Oils and Their Derivatives as Alternative Diesel Fuels. Available at : http://biodiesel.org/reports/19961201_gen-162.pdf. 2014. Accessed June 6, 2014.
2014. Accessed June 6, 2014.

[Knothe*et al*., 2014] Gerhard Knothe, Robert O. Dunn and Marvin O. Bagby. Biodiesel:The Use of Vegetable Oils and Their Derivatives as Alternative Diesel Fuels. Available at : http://journeytoforever.org/biofuel_library/VegetableOilsKnothe.pdf.

[Kumar and Sharma, 2008] Ashwani Kumar and Satyawati Sharma. An evaluation of multipurpose oil seed crop for industrial uses (*Jatrophacurcas* L.): A review. Industrial Crops and Products. 2008, pp. 1-10.
2014. Accessed June 6, 2014.

[Gu*et al*., 2012] KeyuGu, Chengxin Yi, Dongsheng Tian, Jatinder Singh Sangha, Yan Hong and Zhongchao Yin.Expression of fatty acid and lipid biosynthetic genes in developing endosperm of *Jatrophacurcas*. Biotechnology for Biofuels, 2012, Vol.5 (47),pp. 1-15.

[Rao *et al*., 2008] Rao G, KorwarG, Shanker A and Ramakrishna Y. Genetic associations, variability and diversity in seed characters, growth, reproductive phenology and yield in *Jatrophacurcas* L. accessions. Trees: Structure and Function, 2008, Vol. 22, pp 697–709.

[Rashid *et al*., 2010] Umer Rashid, Farooq Anwar, Amer Jamil and Haq Nawaz Bhatti. *Jatrophacurcas* Seed Oil as a Viable Source for Biodiesel. Pak.J. Bot., 2010,Vol. 42 (1), pp 575-582.

[Kumar and Sharma, 2008] Ashwani Kumar and Satyawati Sharma. An evaluation of multipurpose oil seed crop for industrial uses (*Jatrophacurcas* L.): A review. Industrial Crops and Products. 2008, pp. 1-10.

[Kumar and Sharma, 2008] Ashwani Kumar and Satyawati Sharma. An evaluation of multipurpose oil seed crop for industrial uses (*Jatrophacurcas* L.) : A review. Industrial Crops and Products. 2008, pp. 1-10.80.

[Ohlrogge and Browse, 1995] John Ohlrogg and John Browse. Lipid Biosynthesis. The Plant Cell,1995, Vol.7, pp. 957-970.

[Hoop *et al*., 2004] Douglas H. Hobbs, John E. Flintham and Matthew J. Hills. Genetic Control of Storage Oil Synthesis in Seeds of Arabidopsis. Plant Physiology, 2004, Vol. 136, pp. 3341-3349.

[Ohlrogge and Browse, 1995] John Ohlrogg and John Browse. Lipid Biosynthesis. The Plant Cell,1995, Vol.7, pp. 957-970.

[Stephen, 2002] Stephen Rawsthorne. Carbon flux and fatty acid synthesis in plants. Progress in Lipid Research, 2002, Vol 41, pp.182-196.

[Stephen, 2002] Stephen Rawsthorne. Carbon flux and fatty acid synthesis in plants. Progress in Lipid Research, 2002, Vol 41, pp.182-196.

[Stephen, 2002] Stephen Rawsthorne. Carbon flux and fatty acid synthesis in plants. Progress in Lipid Research, 2002, Vol 41, pp.182-196.

[Mustafa *et al*., 2011] Natali R Mustafa, Ward de Winter, Frank van Iren and Robert Verpoorte. Initiation, growth and cryopreservation of plant cell suspension cultures. Nature protocols,Mustafa *et al*., 2011, Vol. 6(6), pp. 715-742.

[Attaya*et al*., 2012] Ahmed SaadAttaya, Danny Geelen and Abd El-Fatah Helmy Belal.Progress In*JatrophaCurcas* Tissue Culture. American-EurasianJournal of Sustainable Agriculture, 2012, Vol, 6(1), pp. 6-13.

[Attaya*et al*., 2012] Ahmed SaadAttaya, Danny Geelen and Abd El-Fatah Helmy Belal.Progress In*JatrophaCurcas* Tissue Culture. American-EurasianJournal of Sustainable Agriculture, 2012, Vol, 6(1), pp. 6-13.

[Soomro and Memon, 2007] Soomro, R. and Memon, R.A..Establishment of callus and suspension culture in *Jatrophacurcas*. Pakistan Journal of Botany, 2007, Vol. 39(7), pp. 2431-2441.

[Murashige andSkoog, 1962] Murashige, T. and F. Skoog.A revised medium for rapidgrowth and bioassays with tobacco tissue cultures. Physiology and Plant, 1962, Vol. 15, pp. 473–479.

[Demissie and Lele, 2013] Demissie A.G. and LeleS.S.. In vitro Cultivation of*Jatrophacurcas* L. cells for Growth Kinetic and Total Fatty acid Determination.Advances in Bioresearch.2013. Vol. 4(3), pp.64-72.

[Thomas and Chaturvedi, 2008] Thuruthiyil Dennis Thomas and RakhiChaturvedi. Endosperm culture: a novel method for triploid plant production. Plant Cell Tissue and Organ Culture, 2008, Vol. 93, pp. 1-14.

[Hoshino *et al*., 2011] Yoichiro Hoshino, Tomomi Miyashita and Thuruthiyil Dennis Thomasa.In vitro culture of endosperm and its application in plant breeding: Approaches to polyploidy breeding. ScientiaHorticulturae, 2011, Vol. 130, pp. 1-8.

[Thomas and Chaturvedi, 2008] Thuruthiyil Dennis Thomas and RakhiChaturvedi. Endosperm culture: a novel method for triploid plant production. Plant Cell Tissue and Organ Culture, 2008 , Vol. 93, pp. 1-14.

[Thomas and Chaturvedi, 2008] Thuruthiyil Dennis Thomas and RakhiChaturvedi. Endosperm culture: a novel method for triploid plant production. Plant Cell Tissue and Organ Culture, 2008, Vol. 93, pp. 1-14.

[Hoshino *et al*., 2011] Yoichiro Hoshino, Tomomi Miyashita and Thuruthiyil Dennis Thomasa. In vitro culture of endosperm and its application in plant breeding: Approaches to polyploidy breeding. ScientiaHorticulturae, 2011, Vol. 130, pp. 1-8.

[Murashige andSkoog, 1962] Murashige, T. and F. Skoog. A revised medium for rapidgrowth and bioassays with tobacco tissue cultures. Physiology and Plant, 1962, Vol. 15, pp. 473–479.

[Hoshino *et al*., 2011] Yoichiro Hoshino, Tomomi Miyashita and Thuruthiyil Dennis Thomasa. In vitro culture of endosperm and its application in plant breeding: Approaches to polyploidy breeding. ScientiaHorticulturae, 2011, Vol. 130, pp. 1-8.

[Zou *et al.*, 1995] J. Zou, G.D. Abrams, D.L. Barton, D.C.Taylor, M.K. Pomeroy, and S.R. Abrams. lnduction of Lipid and Oleosin Biosynthesis by (+) - Abscisic Acid and Its Metabolites in Microspore-Derived Embryos of*Brassica napus* cv. Reston. Plant Physiology,1995, Vol. 108, pp. 563-571.

[Zou *et al.*, 1995] J. Zou, G.D. Abrams, D.L. Barton, D.C.Taylor, M.K. Pomeroy, and S.R. Abrams. lnduction of Lipid and Oleosin Biosynthesis by (+) - Abscisic Acid and Its Metabolites in Microspore-Derived Embryos of*Brassica napus* cv. Reston. Plant Physiology,1995, Vol. 108, pp. 563-571.

[Zou *et al.*, 1995] J. Zou, G.D. Abrams, D.L. Barton, D.C.Taylor, M.K. Pomeroy, and S.R. Abrams. lnduction of Lipid and Oleosin Biosynthesis by (+) - Abscisic Acid and Its Metabolites in Microspore-Derived Embryos of*Brassica napus* cv. Reston. Plant Physiology,1995, Vol. 108, pp. 563-571.

[Zou *et al.*, 1995] J. Zou, G.D. Abrams, D.L. Barton, D.C.Taylor, M.K. Pomeroy, and S.R. Abrams. lnduction of Lipid and Oleosin Biosynthesis by (+) - Abscisic Acid and Its Metabolites in Microspore-Derived Embryos of*Brassica napus* cv. Reston. Plant Physiology,1995, Vol. 108, pp. 563-571.

[Kiong*et al*., 2007] Anna Ling Pick Kiong, Yeo Shu Thing1, JualangAzlanGansau andSobri Hussein. 2008. Induction and multiplication of callus from endosperm of *Cycas revolute*. African Journal of Biotechnology, 2008, Vol. 7(23), pp. 4279-4284.

[Dalila*et al*., 2013] Z. DhiyaDalila, HafsahJaafar and A. Abdul Manaf. Effects of 2, 4-D and Kinetin on Callus Induction of *Barringtoniaracemosa* Leaf and Endosperm Explants in Different Types of Basal Media. Asian Journal of Plant Sciences, 2013. Vol. 12, pp. 21-27.

[Monacelli*et al*., 1995] Monacelli B, Pasqua A, Cuteri A, Varusio B, Batta Monache GD. 1995. Histological study of callus formation and optimization of cell growth in *TaxusBaccata*. Cytobios., Vol. 81, pp. 159-170.

[Rajore and Batra, 2007] Rajore S, Batra A. An alternative source for regenerable organogenic callus induction in *Jatrophacur*cus.Indian Journal of Biotechnology, 2007, Vol. 6, pp. 545-548.

[Astra *et al*., 2006] Astha, S., N. Kansal, G.S. Shekhawat. In vitro culture and plant regeneration of economically potent plant species *Jatrophacurcas*. Biochemical and Cellular Archives, 2006, Vol.6: pp. 323-327.

[Kiong*et al*., 2007] Anna Ling Pick Kiong, Yeo Shu Thing1, JualangAzlanGansau andSobri Hussein. 2008. Induction and multiplication of callus from endosperm of *Cycas revolute*. African Journal of Biotechnology, 2008, Vol. 7(23), pp. 4279-4284.

[Trigano and Gray, 2005] Trigiano, R.N. and D.J. Gray.2005. Plant Development and Biotechnology. CRC Press LLC, New York. pp: 358.

[Li *et al*., 2012] Zhong-Guang Li, Ming Gong, Shi-Zhong Yang and Wei-Biao Long. Efficient callus induction and indirect plant regeneration from various tissues of *Jatrophacurcas*. African Journal of Biotechnology, April 2012,Vol. 11(31), pp. 7843-7849.

[Pei *et al*., 2006] Hou Pie, Zhang Shuwen, Yang Lin, Tang Lin, Wang Shenghua, Tan Huimin and Chen Fang. Callus induction from Jatrophacurcas Endosperm and Elimination of Microbial Contamination in Culture. Chinese Journal of Applied and Environmental Biology, 2006, Vol.12(2), pp.264-268.

[Savitha andNaik, 2011] Savitha G. and Naik, G.R..Evaluation of suitable concentration of PGRs on callus induction, proliferation, somatic embryogenesis and regeneration in *Jatrophacurcas* L. Advances in Plant Sciences, 2011, Vol. 24(1), pp. 77-80.

[Dalila*et al*., 2013] Z. DhiyaDalila, HafsahJaafar and A. Abdul Manaf. Effects of 2,4-D and Kinetin on Callus Induction of *Barringtoniaracemosa* Leaf and Endosperm Explants in Different Types of Basal Media. Asian Journal of Plant Sciences, 2013. Vol. 12, pp. 21-27.

[Trigano and Gray, 2005] [Trigano and Gray, 2005] Trigiano, R.N. and D.J. Gray. 2005. Plant Development and Biotechnology. CRC Press LLC, New York. pp: 358.

[Soomro and Memon, 2007] Soomro, R. and Memon, R.A..Establishment of callus and suspension culture in *Jatrophacurcas*. Pakistan Journal of Botany, 2007, Vol. 39(7), pp. 2431-2441.

[Dixon and Gonzales, 1994] R.A. Dixon and R.A. Gonzales. 1994. Plant Cell Culture: A Practical Approach.Second edition.IRL Press. Tokyo.230 pp.

[Demissie and Lele, 2013] Demissie A.G. and LeleS.S.. In vitro Cultivation of*Jatrophacurcas* L. cells for Growth Kinetic and Total Fatty acid Determination.Advances in Bioresearch.2013. Vol. 4(3), pp.64-72.

[Collin and Edward, 1998] Collin, H.A.; Edward, S. Plant cell culture. 1998. Oxford: BIOS Scientific Publishers.168 pp.

[Soomro and Memon, 2007] Soomro, R. and Memon, R.A..Establishment of callus and suspension culture in *Jatrophacurcas*. Pakistan Journal of Botany, 2007, Vol. 39(7), pp. 2431-2441.

[Kharenko*et a*l., 2010]Olesya A. Kharenko, L. Irina Zaharia, Michael Giblin, Vera C ˇ ekic´, David C. Taylor, C. Don Palmer, Suzanne R. Abrams andMichele C. Loewen. Abscisic acid metabolism and lipid accumulation of a cellsuspension culture of *Lesquerellafendleri*. Plant Cell, Tissue and Organ Culture, November 2010,8 pp.

[Demissie and Lele, 2013] Demissie A.G. and LeleS.S.. In vitro Cultivation of*Jatrophacurcas* L. cells for Growth Kinetic and Total Fatty acid Determination.Advances in Bioresearch.2013. Vol. 4(3), pp.64-72.

[Staba*et al*., 1971] Staba, E.J., Shin, B.S. and Mangold, H.K. Lipid in plant tissue cultures: I. the fatty acid composition of triglyderides in rape and turnip rape cultures. Chemistry Physic of Lipids, 1971, Vol. 6, pp. 291-295.

[James, 1985] James, A.T. The biotechnology of oil seed crops. Journal of the American Oil Chemical Society, 1985, Vol. 62(2), pp. 204-206.

[Mangold, 1986] Mangold, H.K. Biosynthesis and biotransformation of lipid in plantcell cultures and algae.Chemistry and Industry, 1986, Vol. 8, pp.260-267.

[Brown *et al*., 1970] Brown, D.J., Canvin, D.T. and Zilkey, B.F. 1970. Growth and metabolism of *Ricinuscommunis* endosperm in tissue culture. Canadian Journal of Botany, 1970, Vol. 48(12), pp. 2323-2331.

[Alam*et al*., 2010] Alam, I., Sharmin, S.A., Mondal, S.C., Alam, Md.J., Khalekuzzaman, M., Anisuzzaman, M. and Alam, M.F. In vitro micropropagationthrough cotyledonary node culture of castor bean(*Ricinuscommunis*L.). Australian Journal of Crop Science, 2010, Vol. 4(2), pp. 81-84.

[Attaya*et al*., 2012] Ahmed SaadAttaya, Danny Geelen and Abd El-Fatah Helmy Belal.Progress In*JatrophaCurcas* Tissue Culture. American-EurasianJournal of Sustainable Agriculture, 2012, Vol, 6(1), pp. 6-13.

[Hapsari*et al*., 2011] Hapsari, B.W., Iriawati, R.R. Esyanti, A.F. Martin and T.S. Mariani. In vitro oil production in somatic embryo of *Jatrophacurcas* L.: microscopic analysis. School of Life Sciences and Technology, Indonesia : InstitutTeknologi Bandung (ITB). 2011

[Correa and Atehortua, 2012]

[Demissie and Lele, 2013] Demissie A.G. and LeleS.S.. In vitro Cultivation of*Jatrophacurcas* L. cells for Growth Kinetic and Total Fatty acid Determination.Advances in Bioresearch.2013. Vol. 4(3), pp.64-72.

[Somporn, 2009] สมพร ประเสริฐส่งสกุล.2552. การเพาะเลี้ยงเนื้อเยื่อกับการปรับปรุงพันธุ์พืช. สำนักพิมพ์โฟร์เพซ. กรุงเทพฯ.

[Demissie and Lele, 2013] Demissie A.G. and LeleS.S.. In vitro Cultivation of*Jatrophacurcas* L. cells for Growth Kinetic and Total Fatty acid Determination.Advances in Bioresearch.2013. Vol. 4(3), pp.64-72.

[Kim *et al*., 1999] Sung Hye Kim, Byung Ki Hur, and Sang YoByun.Effect of Sugar Concentration on CamptothecinProductionin Cell Suspension Cultures of *Camptothecaacuminata*.Biotechnology and Bioprocess Engineering, December 1999, Vol.4, pp. 277-280.

[Rajendran*et al.*, 1992] Rajendran L., Ravishankar G.A., Venkataraman L.V., andPrathiba K.R. Anthocyanin production in callus cultures of *Daucuscarota* influenced by nutrient stress and osmoticum. Biotechnology Letters, 1992, Vol.14, pp. 707-712.

[Park and Kim, 1993] In-Suk Park and Dong-II Kim.Significance of fresh weight to dry cell weight ratio in plant cell suspension cultures. Biotechnology Techniques, September 1993, Volume 7(9), pp. 627-630.

[Xin *et al*., 2013] Li Xin, Hu Hong-ying and Zhang Yu-ping.Growth and lipid accumulation properties of a freshwater microalga *Scenedesmus*sp. under different cultivation temperature.Bioresource Technology, 2011, Vol. 102, pp. 3098-3102.

[Zárate*et al*., 2013] Rafael Zárate, Elena Cequier-Sánchez, Covadonga Rodríguez, Roberto Dorta-Guerra, Nabil El Jaber-Vazdekis and Ángel G. Ravelo.2013. Improvement of Polyunsaturated Fatty Acid Production In*Echiumacanthocarpum* Transformed Hairy Root Cultures by Application of Different Abiotic Stress Conditions. Biotechnology.pp.1-19.

[Xu *et al.*, 2003] Y.-N. Xu, Z.-N.Wang, G.-Z.Jiang, L.-B.Li, and T.-Y. Kuang. Effect of various temperatures on phosphatidylglycerol biosynthesis in thylakoid membranes. PhysiologiaPlantarum, 2003, Vol. 118(1), pp. 57–63.

[Umura*et al*., 2006] M. Uemura, Y. Tominaga, C. Nakagawara, S. Shigematsu, A. Minami, and Y. Kawamura.Responses of the plasma membrane to low temperatures. PhysiologiaPlantarum, 2006, vol. 126, no. 1, pp. 81-89.

[Nigar*et al.*, 2005] NigarKantarcia, FahirBorakb and Kutlu O. Ulgena. Review : Bubble column reactors. Process Biochemistry, 2005, Vol. 40 : 2263–2283.

LIST OF PUBLICATIONS

1) Makawat Pasitvilaiturm and Tanachai Pankasemsuk. 2011. Endosperm Culture of *Jatropha curcas* L. CMU. J. Nat. Sci. Special Issue on Agricultural & Natural Resources (2012). 97-102.
2) Kritsaphong Phasitvilaitham and Tanachai Pankasemsuk. 2014. Effect of callus content on growth and oil content in physic nut (*Jatropha curcas* L.) endosperm suspended cells. Rajabhat J. Sci. Humanit. Soc. Sci 15(1): 76-86.