

เอกสารอ้างอิง

- กรมพัฒนาที่ดิน กระทรวงเกษตรและสหกรณ์. 2538. การดูงานภาคสนามสื่อมวลชนสัญจรช่วย
อีสานต้านดินเค็ม วันที่ 19 เมษายน 2538 พื้นที่อำเภอพระยืน จังหวัดขอนแก่น. วาร
สารพัฒนาที่ดิน ปีที่ 32 ฉบับที่ 358-359. หน้า 16-27.
- เขมิกา โขมพัตร. 2545. การควบคุมการทำงานของเอนไซม์ในเตอร์วิตักษ์ในต้นข้าวไร่. วิทยา
นิพนธ์วิทยาศาสตร์บัณฑิต สาขาชีวเคมี คณะบัณฑิตวิทยาลัย มหาวิทยาลัย
สงขลานครินทร์.
- ชัยฤกษ์ มนีพงษ์. 2524. ข้าวไร่. ข่าวสารเกษตรศาสตร์. 26(1): 1.
- ทวี คุปต์กาญจนากุล. 2541. ความรู้เรื่องข้าวและเทคโนโลยีการผลิตข้าว. ในเอกสารประกอบ
การบรรยาย หลักสูตรเทคโนโลยีการผลิตข้าวหอมมะลิคุณภาพดี. กลุ่มวิชาการเกษตร:
สถาบันวิจัยข้าว.
- ธีระ เอกสมทวารเมฆ. 2528. การศึกษาเบรียบเทียบลักษณะบางประการและการตอบสนองต่อ
น้ำข่องข้าวไร่บางสายพันธุ์. วารสารสงขลานครินทร์. 7: 133-136.
- พรณี รุ่งแสงจันทร์. 2532. การเพิ่มผลผลิตข้าวในพื้นที่ดินเค็ม. วารสารพัฒนาที่ดิน. 26(287):
10-19.
- พิรพงษ์ พึงแย้ม. 2545. การวิเคราะห์สมบัติของไวนิลโลจีนินและการตรวจหาตัวรับไวนิลโล
จีนจากปลากระบogic. วิทยานิพนธ์วิทยาศาสตร์บัณฑิต สาขาชีวเคมี คณะ
บัณฑิตวิทยาลัย มหาวิทยาลัยสงขลานครินทร์.
- เล็ก มณฑ์เจริญ. 2532. ความเค็มกับการเจริญเติบโตของพืช. วารสารพัฒนาที่ดิน. 26(287):
20-29.
- สมศรี อรุณินท์. 2532. พืชทนเค็ม. วารสารพัฒนาที่ดิน. 26(287): 38-46.
- Antipov, A.N., Lyalikova, N.N., Khijniak, T.V. and Lvov, N.P. 2000. Vanadate reduction
by molybdenum-free dissimilatory nitrate reductases from vanadate reducing
bacteria. *IUBMB Life*. 50(1): 39-42.
- Aslam, M., Travis, R.L. and Rains, D.W. 2001. Differential effect of amino acids on
nitrate uptake and reduction systems in barley roots. *Plant Sci.* 160: 219-228.
- Bachmann, M., Huber, J.L., Athwal, G.S., Ke, W., Ferl, W.K. and Huber, S.C. 1996. 14-
3-3 proteins associate with the regulatory phosphorylation site of spinach leaf

- nitrate reductase in an isoform-specific manner and reduce dephosphorylation of Ser-543 by endogenous protein phosphatases. *FEBS Lett.* 398(1): 26-30.
- Barabas, N.K. Omarov, R.T., Erdei, L. and Lips, S.H. 2000. Distribution of the Mo-enzymes aldehyde oxidase, xanthine dehydrogenase and nitrate reductase in maize (*Zea mays* L.) nodal roots as affected by nitrogen and salinity. *Plant Sci.* 155(1): 49-58.
- Beevers, L. and Hageman, R.H. 1969. Nitrate reduction in higher plants. *Annu. Rev. Plant Physiol.* 20: 495-522.
- Blumwald, E. and Poole, R.J. 1985. Nitrate storage and retrieval in Beta vulgaris : Effects of nitrate and chloride on proton gradients in tonoplast vesicles. *Proc. Natl. Acad. Sci. USA.* 82: 3683-3687.
- Campbell, W.H. 1996. Nitrate reductase biochemistry comes of age. *Plant Physiol.* 111: 355-361.
- Campbell, W.H. 1999. Nitrate reductase structure, function and regulation : bridging the gap between biochemistry and physiology. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 50: 277-303.
- Campbell, J.M. and Wray, J.L. 1983. Purification of barley nitrate reductase and demonstration of nicked subunits. *Phytochemistry.* 22: 2375-2382.
- Campbell, W.H., DeGracia, D.J. and Campbell, E.R. 1987. Regulation of molybdenum cofactor of maize leaf. *Phytochemistry.* 26: 2149-2150.
- Cataldo, D.A., Haroon, M., Schrader, L.E. and Youngs, V.L. 1975. Rapid colorimetric determination of nitrate in plant tissue by nitration of salicylic acid. *Commun. Soil Sci. Plant Anal.* 6: 71-80.
- Chrispeels, M.J., Crawford, N.M. and Schroeder, J.I. 1999. Protein for transport of water and mineral nutrients across the membranes of plant cells. *Plant Cell.* 11: 661-675.
- Coombs, J. and Hall, D.O. 1982. Techniques in bioproduction and photosynthesis. First edition. Great Britain : A. Wheaton&Co., Ltd.

- Crawford, N.M. 1995. Nitrate: nutrient and signal for plant growth. *Plant Cell.* 7: 859-868.
- Crawford, N.M. and Glass, A.D.M. 1998. Molecular and physiological aspects of nitrate uptake in plants. *Trends Plant Sci. Rev.* 3(10): 389-395
- Davis, B.J. 1964. Disc electrophoresis II. Method and application to human serum protein. *Annu. N.Y. Acad. Sci.* 121: 404-427.
- De Datta, S.K. 1981. Principles and practices of rice production. First edition. USA : John Wiley & Son. Inc.
- Delfine, S., Alvino, A., Villani, M.C. and Loreto, F. 1999. Restriction to carbon dioxide conductance and photosynthesis in spinach leaves recovering from salt stress. *Plant Physiol.* 119: 1101-1106.
- Dobermann, A. and Fairhurst, T. 2000. Rice. Nutrient disorders & nutrient management. Potash & Phosphate Institute of Canada (PPIC) and International Rice Research Institute. 191 p.
- Douglas, P., Morrice, N. and MacKintosh, C. 1995. Identification of a regulatory phosphorylation site in the hinge 1 region of nitrate reductase from spinach (*Spinacea oleracea*) leaves. *FEBS Lett.* 377(2): 113-117.
- Feil, B., Thiraporn, R. and Stamp, P. 1993. *In vivo* nitrate reductase activity of laboratory-grown seedlings as an indirect selection criterion for maize. *Crop Sci.* 33: 1280-1286.
- Ferrario, S., Valadier, M. and Foyer, C.H. 1998. Over-expression of nitrate reductase in tobacco delays drought-induced decreases in nitrate reductase activity and mRNA. *Plant Physiol.* 117: 293-302.
- Flowers, T.J., Troke, P.F. and Yeo, A.R. 1977. The mechanism of salt tolerance in halophytes. *Annu. Rev. Plant Physiol.* 28: 89-121.
- Flowers, T.J. and Yeo, A.R. 1988. Ion relations of salt tolerance. In *Solute Transport in Plant Cells and Tissues*. Bakers, D.A and Hall, J.L. (eds), Longman Scientific and Technical, Harlow, UK. 392-416.

- Flowers, T.J. and Yeo, A.R. 1992. *Solute Transport in Plants*. Glasgow, Scotland: Blackie. 176 pp.
- Forde, B. 2000. Nitrate transporters in plants: structure, function and regulation. *Biochim. Biophys. Acta*. 1465: 219-235.
- Ghoulam, C., Foursy, A. and Fares, K. 2002. Effects of salt stress on growth, inorganic ions and proline accumulation in relation to osmotic adjustment in five sugar beet cultivars. *Environ. Exp. Bot.* 47: 39-50.
- Glass, A.D.M., Brito, D.T., Kaiser, B.N., Kronzucker, H.J., Kumar, A.L., Kamoto, M., Rawat, S.R., Siddiqi, Y., Silim, S.M., Vidmar, J.J. and Zhuo, D. 2001. Nitrogen transport in plants, with an emphasis on the regulation of fluxes to match plant demand. *J. Plant Nutr. Soil Sci.* 164: 199-207.
- Glenn, E.P., Brown, J.J. and Blumwald, E. 1999. Salt tolerance and crop potential of halophytes. *Crit. Rev. Plant Sci.* 18: 227-255.
- Gouia, H., Ghorbal, M.H. and Touraine, B. 1994. Effects of NaCl on flows of N and mineral ions and on NO_3^- reductase rate within whole plants of salt-sensitive bean and salt-tolerant cotton. *Plant Physiol.* 105: 1409-1418.
- Granstedt, R.C. and Huffaker, R.C. 1982. Identification of the leaf vacuole as a major nitrate storage pool. *Plant Physiol.* 70: 410-413.
- Grattan, S.R., Zeng, L., Shannon, M.C. and Roberts, S.R. 2002. Rice is more sensitive to salinity than previously thought. *Cali. Agri.* 56(6): 189-195.
- Greenway, H. and Munns, R. 1980. Mechanisms of salt tolerance in non-halophytes. *Annu. Rev. Plant Physiol.* 31: 149-190.
- Guerrero, M.G., Vega, J.M. and Losada, M. 1981. The assimilatory nitrate reductase reducing system and its regulation. *Annu. Rev. Plant Physiol.* 32 : 169-204.
- Hagege, D., Kevers, C., Le Dily, F., Gaspar, T. and Boucaud, J. 1990. NaCl dependent growth rate of normal and habituated sugar beet calli, ethylene production and peroxidase activity. *C.R. Acad. Sci. Paris* 310 (Ser. III). 259-264.

- Hasegawa, P.M., Bressan, R.A., Zhu, J. and Bohnert, H.J. 2000. Plant cellular and molecular responses to high salinity. *Annu. Rev. Plant Mol. Biol.* 51: 463-499.
- Hoagland, D.R. and Arnon, D.I. 1950. The water-culture method for growing plants without soil. *Calif. Agric. Exp. Stn. Circ.* 347: 1-39.
- Hoff, T., Schnorr, K.M., Meyer, C. and Caboche, M. 1995. Isolation of two *Arabidopsis* cDNAs involved in early steps of molybdenum cofactor biosynthesis by functional complementation of *Escherichia coli* mutants. *J. Biol. Chem.* 270: 6100-6107.
- <http://www.doa.go.th/data.agri/RICE.html>
- <http://www.IRRI/The Plant and How it Grows.htm>
- <http://www.iisc.ernet.in/~currsci/may25/articles 26.htm>
- <http://www.kanchanapisek.or.th>
- <http://www.nitrate.com/ab2.htm>
- Huber, S.C., Huber, J., Campbell, W.H. and Redinbaugh, M.G. 1992. Apparent dependence of the light activation of nitrate reductase and sucrose-phosphate synthase activities in spinach leaves on protein synthesis. *Plant Cell. Physiol.* 33(5): 639-646.
- Jackson, W.A., Pan, W.A., Moll, R.H. and Kamprath, E.J. 1986. Uptake, translocation and reduction of nitrate. In *Biochemical Basis of Plant Breeding*. Neyra, C. (ed), Boca Raton, FL: CRC Press. pp. 73-108.
- Jawali, N. and Sane, P.V. 1984. Inhibition of the nitrate reductase complex from spinach by oxylamines. *Phytochem.* 23: 225-228.
- Jochem, F.J., Smith, G.J., Gao, Y., Zimmerman, R.C., Cabello-Pasini, A., Kohrs, D.G. and Alberte, R.S. 2000. Cytometric Quantification of Nitrate Reductase by Immunolabeling in the Marine Diatom *Skeletonema costatum*. *Cyto.* 39: 173-178.
- Jolly, S.O., Campbell, W. and Tolbert, N.E. 1976. NADPH-and NADH-nitrate reductase from soybean leaves. *Arch. Biochem. Biophys.* 174: 431-439.

- Klammer, S.P., Johnson, J.L., Ribeiro, A.A., Millington, D.S. and Rajagopalan, K.V. 1987. The structure of the molybdenum cofactor, Characterization of di-(carboxamidomethyl) molybdopterin from sulfite oxidase and xanthine oxidase. *J. Biol. Chem.* 262: 16357-16363.
- Klobus, G., Ward, W.R. and Huffaker, R.C. 1988. Characteristics of injury and recovery of net NO_3^- transport of barley seedlings from treatments of NaCl. *Plant Physiol.* 87: 878-882.
- Larios, B., Aguera, E., Haba, P., Vicente, R.M. and Maldonado, J.M. 2001. A short-term exposure of cucumber plants to rising atmospheric CO_2 increases leaf carbohydrate content and enhances nitrate reductase expression and activity. *Planta.* 21: 305-312.
- Larsson, C.M. and Ingemarsson, B. 1989. Molecular aspects of nitrate uptake in higher plants. In *Molecular and Genetic Aspects of Nitrate Assimilation*, Wray, J.L. and Kinghorn, J.R. (eds), Oxford: Oxford Science Publ. pp. 3-14.
- Lillo, C., Kazazaic, S., Ruoff, P. and Meyer, C. 1997. Characterization of nitrate reductase from light and dark exposed leaves. *Plant Physiol.* 114: 1377-1383.
- Lopes, P.F., Oliveira, M.C. and Colepicolo, P. 2002. Characterization and daily variation of nitrate reductase in *Gracilaria tenuistipitata* (Rhodophyta). *Biochem. Biophys. Res. Commu.* 295: 50-54.
- 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, B.R. 1999. Taxonomy of the genus *Oryza* (Poaceae): historical perspective and current status. *Genetic Resources Center, IRRI.* 4-8.
- MacKintosh, C., Douglas, P. and Lillo, C. 1995. Identification of a protein that inhibits the phosphorylated form of nitrate reductase from spinach (*Spinacia oleracea*) leaves. *Plant Physiol.* 107: 451-457.

- Martinez-Espinosa, R.M., Marhuenda-Egea, F.C. and Bonete, M.J. 2001. Assimilatory nitrate reductase from the haloarchaeon *Haloferax mediterranei*: purification and characterization. *FEMS Microbiol. Letts.* 204: 381-385.
- Mattana, M., Coraggio, I., Bertani, A. and Reggiani, R. 1994. Expression of the enzymes of nitrate reduction during the anaerobic germination of rice. *Plant Physiol.* 106: 1605-1608.
- Miller, A.J. and Smith, S.J. 1992. The mechanism of nitrate transport across the tonoplast of barley root cells. *Planta.* 187: 554-557.
- Moorhead, G., Douglas, P., Morrice, N., Scatabel, M., Aitken, A. and MacKintosh, C. 1996. Phosphorylated nitrate reductase from spinach leaves is inhibited by 14-3-3 proteins and activated by fusicoccin. *Curr. Biol.* 6(9): 1104-1113.
- Mori, H. 2000. Direct determination of nitrate reductase in a flow system. *J. Health Sci.* 46(5): 385-388.
- Munns, R. 1993. Physiological processes limiting plant growth in saline soil: some dogmas and hypotheses. *Plant Cell Environ.* 16: 15-24.
- Munns, R. and Termaat, A. 1986. Whole-plant responses to salinity. *Aust. J. Plant Physiol.* 13: 143-160.
- Nakamura, Y. and Ikawa, T. 1993. Purification and properties of NADH: nitrate reductase from the red alga *Porphyra yezoensis*. *Plant Cell Physiol.* 34(8): 1239-1249.
- Nakamura, Y., Saji, H., Kondo, N. and Ikawa, T. 1994. Preparation of Monoclonal Antibodies against NADH: Nitrate Reductase from the Red Algae *Porphyra yezoensis*. *Plant Cell Physiol.* 35(8): 1185-1198.
- Ouchterlony, O. 1956. Antigen-antibody reactions in gel. V Types of reactions in co-ordinated systems of diffusion. *Acta. Path. Microbiol. Scand.* 32: 231-240.
- Rai, A.K. and Rai, V. 2003. Effect of NaCl on growth, nitrate uptake and reduction and nitrogenase activity of *Azolla pinnata-Anabaena azollae*. *Plant Sci.* 164: 61-69.

- Ramalho, C.B., Hastings, J.W. and Colepicolo, P. 1995. Ciradian oscillation of nitrate reductase activity in *Gonyaulax polyedra* is due to change in cellular protein levels. *Plant Physiol.* 107: 225-231.
- Scheible, W.R., Lauerer, M., Schulze, E.D., Caboche, M. and Stitt, M. 1997. Accumulation of nitrate in the shoot acts as a signal to regulate shoot-root allocation in tobacco. *Plant J.* 11: 671-691.
- Silveira, J.A.G., Melo, A.R.B., Viegas, R.A. and Oliveira, J.T.A. 2001. Salinity-induced effects on nitrogen assimilation related to growth in cowpea plants. *Environ. Exp. Bot.* 46: 171-179.
- Solomonson, L.P., Lorimer, G.H., Hall, R.L., Borchers, R. and Bailey, J.L. 1975. Reduced nicotinamide adenine dinucleotide-nitrate reductase of *Chlorella vittaris*, purification, prosthetic groups and molecular properties. *J. Biol. Chem.* 250(11): 1420-1427.
- Su, W., Huber, S.C. and Crawford, N.M. 1996. Identification in vitro of a post-translational regulatory site in the hinge 1 region of *Arabidopsis* nitrate reductase. *Plant Cell.* 8: 519-527.
- Sultana, N., Ikeda, T. and Itoh, R. 1999. Effect of NaCl salinity on photosynthesis and dry matter accumulation in developing rice grains. *Environ. Exp. Bot.* 42: 211-220.
- 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.* 76: 4350-4356.
- Vance, C.P. and Griffith, S.M. 1990. The molecular biology of N metabolism. In *Plant Physiology Biochemistry and Molecular Biology*, eds Dennis, D.T. and Turpin, D.H. Kingston, Canada. pp. 371-388.
- Viegas, R.A. and Silveira, J.A.G. 1999. Ammonia assimilation and proline accumulation in young cashew plants during long-term exposure to NaCl-salinity. *Braz. J. Plant Physiol.* 11: 153-159.

- Wanichananan, P., Kirdmanee, C. and Vutiyano, C. 2003. Effect of salinity on biochemical and physiological characteristics in correlation to selection of salt-tolerance in aromatic rice (*Oryza sativa L.*). *Sci. Asia.* 29: 333-339.
- Warden, B.A. and Giese, R.W. 1984. Soluble antibody affinity chromatography techniques investigated with ultratrace ^{125}I -thyroxin. *J. Chromatogr.* 314: 295-302.
- Weiner, H. and Kaiser, W.M. 1999. 14-3-3 proteins control proteolysis of nitrate reductase in spinach leaves. *FEBS Letts.* 455: 75-78.
- Yamasaki, H. and Sakihama, Y. 2000. Simultaneous production of nitric oxide and peroxynitrite by plant nitrate reductase : In vitro evidence for the NR-dependent formation of active nitrogen species. *FEBS Letts.* 468: 89-92.
- Yeo, A.R. 1998. Molecular biology of salt tolerance in the context of whole-plant physiology. *J. Exp. Bot.* 49: 915-929.
- Zeng, L., Lesch, S.M. and Grieve, C.M. 2003. Rice growth and yield respond to changes in water depth and salinity stress. *Agricultural Water Management.* 59: 67-75.