

**GENERAL BODY OF RESEARCH ON THE
SPECIES OF MYCORRHIZAE SELECTED
FOR USE IN DIEHARD™ PRODUCTS**
(As of July 2005)

Authors Note: The research references listed herein come from a wide variety of sources including the web pages of Dr. David Sylvia, USDA, INVAM and others.

Horticultural Alliance, Inc.
1550 66th Avenue Drive East
Sarasota, FL 34243
800-628-6373
888-386-4478
<http://www.horticulturalalliance.com>
sales@horticulturalalliance.com

Glomus deserticola

Atayese MO, Awotoye OO, Osonubi O, Mulongoy K. Comparisons of the influence of vesicular-arbuscular mycorrhiza on the productivity of hedgerow woody legumes and cassava at the top and base of a hillslope in alley cropping systems. *Biol Fertil Soils* **16** () 198-204 (1993).

Augé, R.M., Schekel, K.A., and Wample, R.L. "Rose leaf elasticity changes in response to mycorrhizal colonization and drought acclimation." *Physiologia Plantarum* **70** (1987):175-182.

Augé, R.M., Schekel, K.A., and Wample, R.L. "Greater leaf conductance of well-watered VA mycorrhizal rose plants is not related to phosphorus nutrition." *New Phytologist* **103** (1986): 107-116.

Augé, R.M., Schekel, K.A., and Wample, R.L. "Osmotic adjustment in leaves of VA mycorrhizal and nonmycorrhizal rose plants in response to drought stress." *Plant Physiology* **82** (1986): 765-770.

Berch, S.M. and Trappe, J.M. "New species of Endogonaceae, *Glomus hoi*." *Mycologia* **77** (1985): 654.

Berch, S.M. and Warner, B.G. "Fossil vesicular-arbuscular mycorrhizal fungi: two *Glomus* species (Endogonaceae, Zygomycetes) from Late Quaternary deposits in Ontario, Canada." *Review of Palaeobotany and Palynology* **45** (1985): 229-237.

Ellis, J.R., Larsen, H.J., and Boosalis, M.G. "Drought resistance of wheat plants inoculated with vesicular-arbuscular mycorrhizae." *Plant and Soil* **86** (1985): 369-378.

Fagbola, O.; Osonubi, O.; Mulongoy, K.; Odunfa, S.A. Effects of drought stress and arbuscular mycorrhiza on the growth of *Gliricidia sepium* (Jacq). Walp, and *Leucaena leucocephala* (Lam.) de Wit. in simulated eroded soil conditions. *Mycorrhiza* **11** (5) 215-223 (2001).

Hetrick, B.A.D., Kitt, D.G., and Wilson, G.T. "The influence of phosphorus fertilization, drought, fungal species, and nonsterile soil on mycorrhizal growth response in tall grass prairie plants." *Canadian Journal of Botany* **64** (1986): 1199-1203.

Martin, J.; Sampedro, I.; GarciaRomera, I.; GarciaGarrido, J.M.; Ocampo, J.A.: Arbuscular mycorrhizal colonization and growth of soybean (*Glycine max*) and lettuce (*Lactuca sativa*) and phytotoxic effects of olive mill residues *Soil Biology & Biochemistry* **34** (11) 1769-1775 (2002).

Mathur, N. and Vyas, A. "In vitro production of *Glomus deserticola* in association with *Ziziphus nummularia*." *Plant Cell Reports* **14**, no. 11 (1995): 735-737.

Paulitz, T.C. and Menge, J.A. "The effect of a mycoparasite on the mycorrhizal fungus, *Glomus deserticola*." *Phytopathology* **76** (1986): 351-354.

Rao, M.S.; Kerry, B.R.; Gowen, S.R.; Bourne, J.M.; Reddy, P.P. Management of *Meloidogyne incognita* in tomato nurseries by integration of *Glomus deserticola* with *Verticillium chlamydosporium*. *Zeitschrift Fur Pflanzenkrankheiten und Pflanzenschutz - Journal of Plant Disease* **104** (4) 419-422 (1997).

Rao, M.S.; Gowen, S.R. Bio-management of *Meloidogyne incognita* on tomato by integrating *Glomus deserticola* and *Pasteuria penetrans*. *Zeitschrift Fur Pflanzenkrankheiten und Pflanzenschutz - Journal of Plant Disease* **105** (1) 49-52 (1998).

Rodriguez, R.; Vassilev, N.; Azcon, R. Increases in growth and nutrient uptake of alfalfa grown in soil amended with microbially-treated sugar beet waste. *Applied Soil Ecology* **11** (1) 9-15 (1999).

Trappe, J.M., Bloss, H.E., and Menge, J.A. "Glomus deserticola sp. nov." *Mycotaxon* 20 (1984): 123-127.

Vassileva, M.; Azcon, R.; Barea, J.M.; Vassilev, N. Effect of encapsulated cells of *Enterobacter* sp on plant growth and phosphate uptake. *Bioresource Technology* 67 (3) 229-232 (1999).

Vassileva, M., Vassilev, N., and Azcon, R. "Rock phosphate solubilization by *Aspergillus niger* on olive cake-based medium and its further application in a soil-plant system." *World Journal of Microbiology & Biotechnology* 14, no. 2 (1998): 281-284

Vassilev, N.; Vassileva, M.; Azcon, R.; Medina, A. Application of free and Ca-alginate-entrapped *Glomus deserticola* and *Yarrowia lipolytica* in a soil-plant system. *Journal of Biotechnology* 91 (2-3) 237-242 (2001).

Will ME, Sylvia DM. Interaction of rhizosphere bacteria, fertilizer, and vesicular-arbuscular mycorrhizal fungi with sea oats. *Appl. Environ. Microbiol.* 56 () 2073-2079 (1990).

Glomus clarum

Arias, I., Sainz, M.J., Grace, C.A., and Hayman, D.S. "Direct observation of vesicular-arbuscular mycorrhizal infection in fresh unstained roots." *Transactions of the British Mycological Society* 89 (1987): 128-130.

Bentivenga, S.P., Bever, J.D., and Morton, J.B. "Genetic variation of morphological characters within a single isolate of the endomycorrhizal fungus *Glomus clarum* (Glomaceae)." *American Journal of Botany* 84, no. 9 (1997): 1211-1216.

Bonfante-Fasolo, P. and Schubert, A. "Spore wall architecture of *Glomus* spp." *Canadian Journal of Botany* 65 (1987): 539-546.

Davis, E.A. and Young, J.L. "Endomycorrhizal colonization of glasshouse-grown wheat as influenced by fertilizer salts when banded or soil-mixed." *Canadian Journal of Botany* 63 (1985): 1196-1203.

Blaszkowski, J. "*Glomus clarum* (Glomales, Zygomycetes), a new vesicular- arbuscular fungus to Poland." *Mycotaxon* 52 (1994): 99-107.

Colozzi-Filho, A., Siqueira, J.O., Junior, O.J.S., Guimaraes, P.T.G., and Oliveira, E. "Effectiveness of different arbuscular-mycorrhizal fungi on initial and post-transplant growth and bean yield of coffee tree seedlings." *Pesquisa Agropecuaria Brasileira* 29, no. 9 (1994): 1397-1406.

Fagbola, O., Osonubi, O., and Mulongoy, K. "Growth of cassava cultivar TMS 30572 as affected by alley-cropping and mycorrhizal inoculation." *Biology and Fertility of Soils* 27, no. 1 (1998): 9-14.

Fonseca EBA, deOliveira E, deSouza M, deCarvalho JG. Effects of phosphorus and inoculation of VAM fungus, on nutrition of two citrus rootstock. *Pesq.agropec.bras., Brasilia* 29 () 1889-1896 (1994).

Handley, L.L., Daft, M.J., Wilson, J., Scrimgeour, C.M., Ingleby, K., and Sattar, M.A. "Effects of the Ecto-Mycorrhizal and VA-Mycorrhizal Fungi *Hydnagium carneum* and *Glomus clarum* on the delta-n-15 and delta-c- 13 Values of *Eucalyptus globulus* and *Ricinus communis*." *Plant Cell and Environment* 16 (1993): 375-382.

Jabaji-Hare, S.H., Therien, J., and Charest, P.M. "High resolution cytochemical study of the vesicular-arbuscular mycorrhizal association, *Glomus clarum* X *Allium porrum*." *New Phytologist* 114 (1990): 481-496.

J.J. Germida Click "Back" on your browser to return to abstracts listings for ICOMs. Bacteria associated with *Glomus clarum* spores influence mycorrhizal activity

Kaya, C.; Higgs, D.; Kirnak, H.; Tas, I.:

Mycorrhizal colonisation improves fruit yield and water use efficiency in watermelon (*Citrullus lanatus* Thunb.) grown under well-watered and water-stressed conditions
Plant and Soil 253 (2) 287-292 (2003).

Louis, I. and Lim, G. "Effect of storage of inoculum on spore germination of a tropical isolate of *Glomus clarum*." *Mycologia* 80 (1988): 157-161.

Louis, I. and Lim, G. "Differential response in growth and mycorrhizal colonization of soybean to inoculation with two isolates of *Glomus clarum* in soils of different P availability." *Plant and Soil* 112 (1988): 37-43.

Louis, I. and Lim, G. "Observations on in vitro sporulation of *Glomus clarum*." *Transactions of the British Mycological Society* 91 (1988): 698-699.

Ponton F, Piche Y, Parent S, Caron M The use of vesicular-arbuscular mycorrhizae in Boston fern production. 2. Evaluation of four inocula. *Hortscience* 25 () 416-419 (1990).

Rich JR, Hammond LC, Esser RP, Arens ML Status of plant parasitic nematodes, VA mycorrhizae, and nutrients in soils used for field corn production in North Florida. *Soil and Crop Science Society of Florida* 41 () 175-178 (1982).

Rothwell, F.M. "Aggregation of surface mine soil by interaction between VAM fungi and lignin degradation products of lespedeza." *Plant and Soil* 80 (1984): 99-104.

Schubert, A. and Hayman, D.S. "Plant growth responses to vesicular-arbuscular mycorrhiza XVI. Effectiveness of different endophytes at different levels of soil phosphate." *New Phytologist* 103 (1986): 79-90.

Schubert, A., Marzachi, C., Mazzitelli, M., Cravero, M.C., and Bonfante-Fasolo, P. "Development of total and viable extraradical mycelium in the vesicular-arbuscular mycorrhizal fungus *Glomus clarum* Nicol. & Schenck." *New Phytologist* 107 (1987): 183-190.

Simpson, D. and Daft, M.J. "Spore production and mycorrhizal development in various tropical crop hosts infected with *Glomus clarum*." *Plant and Soil* 121 (1990): 171-178.

TALUKDAR NC; GERMIDA JJ. 1994 GROWTH AND YIELD OF LENTIL AND WHEAT INOCULATED WITH 3 GLOMUS ISOLATES FROM SASKATCHEWAN SOILS. *MYCORRHIZA* 5: 145-152. Address: UNIV SASKATCHEWAN, DEPT SOIL SCI,

Vaast, P., Caswellchen, E.P., and Zasoski, R.J. "Influences of a root-lesion nematode, *Pratylenchus coffeae*, and two arbuscular mycorrhizal fungi, *Acaulospora mellea* and *Glomus clarum* on coffee (*Coffea arabica* L.)." *Biology and Fertility of Soils* 26, no. 2 (1998): 130-135.

Venkateswarlu, k., Algarni, S.M., and Daft, M.J. "The impact of carbofuran soil application on growth and mycorrhizal colonization by *Glomus clarum* of groundnut." *Mycorrhiza* 5, no. 2 (1994): 125-128.

Walley, F.L. and Germida, J.J. "Response of spring wheat (*triticum aestivum*) to interactions between *pseudomonas* species and *glomus clarum* NT4." *Biology and Fertility of Soils* 24, no. 4 (1997): 365-371.

Walley, F.L. and Germida, J.J. "Failure to decontaminate *Glomus clarum* NT4 spores is due to spore wall-associated bacteria." *Mycorrhiza* 6, no. 1 (1996): 43-49.

Xavier, L.J.C. and Germida, J.J. "Growth response of lentil and wheat to *Glomus clarum* NT4 over a range of P levels in a Saskatchewan soil containing indigenous AM fungi." *Mycorrhiza* 7, no. 1 (1997): 3-8.

Glomus etunicatum

This species is one of the most common found throughout the world, based on the number and distribution of accessions in INVAM (from tundra of Alaska to deserts of Namibia).

Aboulnasr, A. "Effects of vesicular-arbuscular mycorrhiza on *Tagetes erecta* and *Zinnia elegans*." *Mycorrhiza* 6, no. 1 (1996): 61-64.

Balaz M, Vosatka M. Vesicular-arbuscular mycorrhiza of *Calamagrostis villosa* supplied with organic and inorganic phosphorus. *Biologia Plantarum* 39 (2) 281-288 (1997).

Baltruschat, H. "Field inoculation of maize with vesicular-arbuscular mycorrhizal fungi by using expanded clay as carrier material for mycorrhiza." *Z.Pflanzenkrank.Pflanzen.* 94 (1987): 419-430.

Blaszkowski, J. "Polish endogonaceae 2. *Acaulospora rugosa*, *glomus aggregatum*, *glomus etunicatum*, *glomus fasciculatum* and *glomus occultum*." *Karstenia* 30 (1990):1-13.

Bressan, W. The interactive effect of phosphorus and nitrogen on "in vitro" spore germination of *Glomus etunicatum* Becker & Gerdemann, root growth and mycorrhizal colonization. *Brazilian Journal of Microbiology* 32 (4) 276-280 (2001).

Bressan, W.; Decarvalho, C.H.S.; Sylvia, D.M. Inoculation of somatic embryos of sweet potato with an arbuscular mycorrhizal fungus improves embryo survival and plantlet formation. *Canadian Journal of Microbiology* 46 (8) 741-743 (2000).

Bryla, D.R.; Koide, R.T. Mycorrhizal response of two tomato genotypes relates to their ability to acquire and utilize phosphorus. *Annals of Botany* 82 (6) 849-857 (1998).

DaSilva-Junior JP, Siqueira JO. Soil-applied synthetic formononetin stimulates arbuscular mycorrhizal formation in corn and soybean. *R.Bras.Fisiol.Veg.* 9 (1) 35-41 (1997).

Dehn B, Bodmer M, Schuepp H. Influence of herbicides on VA mycorrhizal propagation in soil. *Symbiosis* 9 () 223-227 (1990).

Demiranda, J.C.C. and Harris, P.J. "Effects of soil phosphorus on spore germination and hyphal growth of arbuscular mycorrhizal fungi." *New Phytologist* 128, no. 1 (1994): 103-108.

dosSantos, V.L.; Muchovej, R.M.; Borges, A.C.; Neves, J.C.L.; Kasuya, M.C.M. Vesicular-arbuscular-/ecto-mycorrhiza succession in seedlings of *Eucalyptus* spp. *Brazilian Journal of Microbiology* 32 (2) 81-86 (2001).

Douhan, G.W.; Rizzo, D.M. Amplified Fragment Length Microsatellites (AFLM) might be used to develop microsatellite markers in organisms with limited amounts of DNA applied to Arbuscular Mycorrhizal (AM) fungi. *Mycologia* 95 (2) 368-373 (2003).

Dosskey MG, Adriano DC. Trace element toxicity in VA mycorrhizal cucumber grown on weathered coal fly ash. *Soil Biol Biochem* 25 () 1547-1552 (1993).

Espeleta, J.F.; Eissenstat, D.M.; Graham, J.H. Citrus root responses to localized drying soil: A new approach to studying mycorrhizal effects on the roots of mature trees. *Plant and Soil* 206 (1) 1-10 (1998).

Espinoza-Victoria D, Quintero-Ramos M, Ferrera-Cerrato R, Bethlenfalvay GJ. Fitting plants to soil through mycorrhizal fungi: plant nutrition in host-endophyte combinations evaluated by the diagnosis and recommendation integrated system. *Biol Fertil Soils* 15 () 96-102 (1993).

Fang, Y.C., McGraw, A.C., Modjo, H., and Hendrix, J.W. "A procedure for isolation of single-spore cultures of certain endomycorrhizal fungi." *New Phytologist* 95 (1983):107-114.

Feldmann, F. and Boyle, C. "Concurrent development of arbuscular mycorrhizal colonization and powdery mildew infection on three *Begonia hiemalis* cultivars." *Z.Pflanzenkrank.Pflanzen.* 105, no. 2 (1998): 121-129.

Feldmann, F., Kruse, W., Boyle, C., and Lieberei, R. "The strain-inherent variability of arbuscular mycorrhizal effectiveness: I. Development of a test system using *Petroselinum crispum* Hoffm. as host." *Symbiosis* 25, no. 1-3 (1998): 115-129.

Feldmann, F. "The strain-inherent variability of arbuscular mycorrhizal effectiveness: II. Effectiveness of single spores." *Symbiosis* 25 (1998): 131-143.

Hetrick, B.A.D., Kitt, D.G., and Wilson, G.T. "Effects of drought stress on growth response in corn, sudan grass, and big blue stem to *Glomus etunicatum*." *New Phytologist* 105 (1987): 403-410.

Hetrick B.A.D., Wilson G.T. Mycorrhizal dependence of modern wheat cultivars and ancestors: a synthesis. *Can J Bot* 71 () 512-518 (1993).

Hetrick, B.A.D., Wilson, G.W.T., and Owensby, C.E. "Influence of mycorrhizal fungi and fertilization on big bluestem seedling biomass." *J.Rubb.Res.Inst.Malaysia* 42 (1989):213-216.

Hetrick, B.A.D., Kitt, D.G., and Wilson, G.T. "The influence of phosphorus fertilization, drought, fungal species, and nonsterile soil on mycorrhizal growth response in tall grass prairie plants." *Canadian Journal of Botany* 64 (1986): 1199-1203.

Kim, K.Y., Jordan, D., and McDonald, G.A. "Effect of phosphate-solubilizing bacteria and vesicular-arbuscular mycorrhizae on tomato growth and soil microbial activity." *Biology and Fertility of Soils* 26, no. 2 (1998): 79-87.

Kitt, D.G., Hetrick, B.A.D., and Wilson, G.T. "Sporulation of two vesicular-arbuscular mycorrhizal fungi in nonsterile soil." *Mycologia* 79 (1987): 896-899.

Klironomos, J.N., Ursic, M., Rillig, M., and Allen, M.F. "Interspecific differences in the response of arbuscular mycorrhizal fungi to *Artemisia tridentata* grown under elevated atmospheric CO₂." *New Phytologist* 138, no. 4 (1998): 599-605.

Liyanage, H.D. Effects of phosphorus nutrition and host species on root colonization and sporulation by vesicular-arbuscular (VA) mycorrhizal fungi in sand-vermiculite medium.(University of Florida, Gainesville: M.S. Thesis, 1989).

Mendoza, J. and Borie, F. "Effect of *Glomus etunicatum* inoculation on aluminum, phosphorus, calcium, and magnesium uptake of two barley genotypes with different aluminum tolerance." *Communications in Soil Science and Plant Analysis* 29, no. 5-6

Nemec, S. "Histochemical characteristics of *Glomus etunicatum* infection of *Citrus limon* fibrous roots." *Canadian Journal of Botany* 59 (1981): 609-625.

Nemec, S. and O'Bannon, J.H. "Response of *Citrus aurantium* to *Glomus etunicatum* and *Glomus mosseae* after soil treatment with selective fumigants." *Plant and Soil* 53 (1979):351-359.

- Nemec, S. and O'Bannon, J.H. "Response of Citrus aurantium to Glomus etunicatum and Glomus mosseae after soil treatment with selected fumigants." *Plant and Soil* 26 (1979):351-361.
- Newman SE, Davies FT, Jr. Influence of field bed position, ground surface color, mycorrhizal fungi, and high root-zone temperature in woody plant container production *Plant Soil* 112 () 29-35 (1988).
- Nogueira, M.A.; Cardoso, E.J.B.N.; Hampp, R. Manganese toxicity and callose deposition in leaves are attenuated in mycorrhizal soybean. *Plant and Soil* 246 (1) 1-10 (2002).
- Pacovsky, R.S. "Diazotroph establishment and maintenance in the Sorghum Glomus Azospirillum association." *Canadian Journal of Microbiology* 35 (1989): 977-981.
- Paulitz TC, Linderman RG. Interactions between fluorescent Pseudomonas and VA mycorrhizal fungi. *New Phytol* 113 () 37-45 (1989).
- Purakayastha, T.J.; Chhonkar, P.K. Influence of vesicular-arbuscular mycorrhizal fungi (Glomus etunicatum L.) on mobilization of zinc in wetland rice (Oryza sativa L.). *Biology and Fertility of Soils* 33 (4) 323-327 (2001).
- Rolin, D.; Pfeiffer, P.E.; Douds, D.D.; Farrell, H.M.; ShacharHill, Y. Arbuscular mycorrhizal symbiosis and phosphorus nutrition: Effects on amino acid production and turnover in leek. *Symbiosis* 30 (1) 1-14 (2001).
- Rubio, R.; Borie, F.; Schalchli, C.; Castillo, C.; Azcon, R. Occurrence and effect of arbuscular mycorrhizal propagules in wheat as affected by the source and amount of phosphorus fertilizer and fungal inoculation. *Applied Soil Ecology* 23 (3) 245-255 (2003).
- Schreiner RP, Koide RT. Stimulation of vesicular-arbuscular mycorrhizal fungi by mycotrophic and nonmycotrophic plant root systems. *Applied and Environmental Microbiology* 59 () 2750-2752 (1993).
- Setua, G.C.; Kar, R.; Ghosh, J.K.; Das, K.K.; Sen, S.K. Influence of arbuscular mycorrhizae on growth, leaf yield and phosphorus uptake in mulberry (Morus alba L.) under rainfed, lateritic soil conditions. *Biology and Fertility of Soils* 29 (1) 98-103 (1999).
- Setua, G.C.; Kar, R.; Satpathy, B.; Das, N.K.; Ghosh, J.K.; Saratchandra, B. Effect of vesicular arbuscular mycorrhiza on growth, leaf yield and phosphorus uptake in mulberry (Morus alba) under irrigated, alluvial soil conditions. *Indian Journal of Agricultural Sciences* 69 (12) 833-836 (1999).
- Suzuki, H.; Kumagai, H.; Oohashi, K.; Sakamoto, K.; Inubushi, K.; Enomoto, S.; Ambe, F. Uptake of 15 trace elements in arbuscular mycorrhizal marigold measured by the multitracer technique. *Soil Science and Plant Nutrition* 46 (2) 283-289 (2000).
- Sylvia, D.M., Hammond, L.C., Bennett, J.M., and Haas, J.H. Field response of corn to water management and inoculation with Glomus etunicatum. 8th North America Conference on Mycorrhizae . 1990.
- Vosatka M, Vejsadova H, Gryndler M, Hrselova H. Effect of Agrobacterium radiobacter on vesicular-arbuscular-mycorrhizal infection and external mycelium of maize. *Folia Microbiol.* 40(1) () 100-103 (1995).
- Wang CL Effect of endomycorrhizae on the growth and yield of Adjuki bean (Phaseolus angularis) *Journal of the Agriculture, Association of China* 148 (?) () 67-80 (1989).
- Weber OB, deAmorim SMC. Phosphate fertilization and vesicular-arbuscular mycorrhizal fungi inoculation in Papaya "Solo". *R.bras.Ci.Solo, Campinas* 18 () 187-191 (1994).

Wilson, G.W.T., Hetrick, B.A.D., and Kitt, D.G. "Suppression of mycorrhizal growth response of big bluestem by non-sterile soil." *Mycologia* 80 (1988): 338-343.

Yamada, Y. and Ikeda, M. "Responses of soybean plants to vesicular-arbuscular mycorrhizal inoculation." *J.Fac.Agr.Kyushu Univ.* 31 (1987): 365-372.

Yao, M.K.; Tweddell, R.J.; Desilets, H. Effect of two vesicular-arbuscular mycorrhizal fungi on the growth of micropropagated potato plantlets and on the extent of disease caused by *Rhizoctonia solani*. *Mycorrhiza* 12 (5) 235-242 (2002).

Glomus intraradices

about-Nasr A (1998) Effects of inoculation with *Glomus intraradices* on growth, nutrient uptake and metabolic activities of squash plants under drought stress conditions. *Ann Agric Sci Cairo* 1:119--133.

● [Abstract](#)

Aguilera-Gomez L, Davies FT, Olalde-Portugal V, Duray SA, Phavaphutanon L. 1999. Influence of phosphorus and endomycorrhiza (*Glomus intraradices*) on gas exchange and plant growth of chile ancho pepper (*Capsicum annuum* L. cv. San Luis). *Photosynthetica* 36: 441-449.

● [Abstract](#)

Augé, R.M., Schekel, K.A., and Wample, R.L. "Rose leaf elasticity changes in response to mycorrhizal colonization and drought acclimation." *Physiologia Plantarum* 70 (1987): 175-182.

Augé, R.M., Schekel, K.A., and Wample, R.L. "Greater leaf conductance of well-watered VA mycorrhizal rose plants is not related to phosphorus nutrition." *New Phytologist* 103 (1986): 107-116.

Augé, R.M., Schekel, K.A., and Wample, R.L. "Osmotic adjustment in leaves of VA mycorrhizal and nonmycorrhizal rose plants in response to drought stress." *Plant Physiology* 82 (1986): 765-770.

Bago, B., Azcón-Aguilar, C., Goulet, A., and Piche, Y. "Branched absorbing structures (BAS): a feature of the extraradical mycelium of symbiotic arbuscular mycorrhizal fungi." *New Phytologist* 139, no. 2 (1998): 375-388.

Bago, B., Azcón-Aguilar, C., and Piche, Y. "Architecture and developmental dynamics of the external mycelium of the arbuscular mycorrhizal fungus *Glomus intraradices* grown under monoxenic conditions." *Mycologia* 90, no. 1 (1998): 52-62.

Blee, K.A. and Anderson, A.J. "Defense-related transcript accumulation in *Phaseolus vulgaris* L colonized by the arbuscular mycorrhizal fungus *Glomus intraradices* Schenck & Smith." *Plant Physiology* 110, no. 2 (1996): 675-688.

Camprubi, A., Calvet, C., and Estaun, V. "Growth enhancement of *Citrus reshni* after inoculation with *Glomus intraradices* and *Trichoderma aureoviride* and associated effects on microbial populations and enzyme activity in potting mixes." *Plant and Soil* 173, no. 2 (1995): 233-238.

Caron, M., Fortin, J.A., and Richard, C. "Effect of phosphorus concentration and *Glomus intraradices* on *Fusarium* crown and root rot of tomatoes." *Phytopathology* 76 (1986): 942-946.

Caron, M., Richard, C., and Fortin, J.A. "Effect of preinfestation of the soil by a vesicular-arbuscular mycorrhizal fungus, *Glomus intraradices*, on *Fusarium* crown and root rot of tomatoes." *Phytoprotection* 67 (1986): 15-19 .

- Datnoff, L.E., Nemeček, S., and Pernezný, K. "Biological control of Fusarium crown and root rot of tomato in Florida using *Trichoderma harzianum* and *Glomus intraradices*." *Biological Control* 5, no. 3 (1995): 427-431.
- David, R., Itzhaki, H., Ginzberg, I., Gafni, Y., Galili, G., and Kapulnik, Y. "Suppression of tobacco basic chitinase gene expression in response to colonization by the arbuscular mycorrhizal fungus *Glomus intraradices*." *Molecular Plant-Microbe Interactions* 11, no. 6 (1998): 489-497.
- De Souza, P.V.D., Berjon, M.A., Orenge, V.A., and Fonfria, M.A. "Troyer citrange growth inoculated with mycorrhizal fungus, in two growing media." *Pesquisa Agropecuaria Brasileira* 32, no. 10 (1997): 1039-1045.
- Dugassa, D.G., Grunewaldt-Stocker, G., and Schonbeck, F. "Growth of *Glomus intraradices* and its effect on linseed (*Linum usitatissimum* L.) in hydroponic culture." *Mycorrhiza* 5, no. 4 (1995): 279-282.
- Dutra, P.V., Abad, M., Almela, V., and Agusti, M. "Auxin interaction with the vesicular-arbuscular mycorrhizal fungus *glomus intraradices* schenck-and-smith improves vegetative growth of 2 citrus rootstocks." *Scientia Horticulturae* 66, no. 1-2 (1996):77-83.
- Ebel, R.C., Welbaum, G.E., Gunatilaka, M., Nelson, W.G., and Augé, R.M. "Arbuscular mycorrhizal symbiosis and nonhydraulic: Signaling of soil drying in *Vigna unguiculata* (L) Walp." *Mycorrhiza* 6, no. 2 (1996): 119-127.
- Elmeskaoui, A., Damont, J.P., Poulin, M.J., Piche, Y., and Desjardins, Y. "A tripartite culture system for endomycorrhizal inoculation of micropropagated strawberry plantlets in vitro." *Mycorrhiza* 5, no. 5 (1995): 313-319.
- Estaun, V., Save, R., and Biel, C. "AM inoculation as a biological tool to improve plant revegetation of a disturbed soil with *Rosmarinus officinalis* under semi-arid conditions." *Applied Soil Ecology* 6, no. 3 (1997): 223-229.
- Frey, B., Vilarino, A., Schüepp, H., and Arines, J. "Chitin and Ergosterol Content of Extraradical and Intraradical Mycelium of the Vesicular-Arbuscular Mycorrhizal Fungus *Glomus intraradices*." *Soil Biology and Biochemistry* 26 (1994): 711-717.
- Fries, L.L.M., Pacovsky, R.S., and Safir, G.R. "Expression of isoenzymes altered by both *glomus intraradices* colonization and formononetin application in corn (*zea-mays* l) roots." *Soil Biology and Biochemistry* 28, no. 8 (1996): 981-988.
- Frey, J.E. and Ellis, J.R. "Relationship of soil properties and soil amendments to response of *Gomus intraradices* and soybeans." *Soil Science Society of America* (1997).
- Frey, J.E. and Ellis, J.R. "Relationship of soil properties and soil amendments to response of *glomus intraradices* and soybeans." *Canadian Journal of Botany* 75, no. 3 (1997): 483-491.
- Fries, L.L.M., Pacovsky, R.S., Safir, G.R., and Kaminski, J. "Phosphorus effect on phosphatase activity in endomycorrhizal maize." *Physiologia Plantarum* 103, no. 2 (1998): 162-171.
- Galli, U., Schuepp, H., and Brunold, C. "Thiols of Cu-treated maize plants inoculated with the arbuscular-mycorrhizal fungus *Glomus intraradices*." *Physiologia Plantarum* 94, no. 2 (1995): 247-253.
- Gaur, A., Adholeya, A., and Mukerji, K.G. "A comparison of AM fungi inoculants using *Capsicum* and *Polianthes* in marginal soil amended with organic matter." *Mycorrhiza* 7, no. 6 (1998): 307-312.
- Graham, J.H., Timmer, L.W., and Fardelmann, D. "Toxicity of fungicidal copper in soil of citrus seedlings and vesicular-arbuscular mycorrhizal fungi." *Phytopathology* 76 (1986): 66-70.

- Graham, J.H. and Fardelmann, D. "Inoculation of citrus with root fragments containing chlamydospores of the mycorrhizal fungus *Glomus intraradices*." *Canadian Journal of Botany* 64 (1986): 1739-1744.
- Hamel, C., Dalpe, Y., Furlan, V., and Parent, S. "Indigenous populations of arbuscular mycorrhizal fungi and soil aggregate stability are major determinants of leek (*Allium porrum* L.) response to inoculation with *Glomus intraradices* Schenck & Smith or *Glomus versiforme* (Karsten) Berch." *Mycorrhiza* 7, no. 4 (1997): 187-196.
- Hamel, C., Morin, F., Fortin, A., Granger, R.L., and Smith, D.L. "Mycorrhizal colonization increases herbicide toxicity in apple." *Journal of American Society for Horticulture Science* 119, no. 6 (1994): 1255-1260.
- Harinikumar, K.M. and Bagyaraj, D.J. "Persistence of introduced *Glomus intraradices* in the field as influenced by repeated inoculation and cropping system." *Biology and Fertility of Soils* 21, no. 3 (1996): 184-188.
- Haugen, L.M. and Smith, S.E. "The Effect of High Temperature and Fallow Period on Infection of Mung Bean and Cashew Roots by the Vesicular arbuscular Mycorrhizal Fungus *Glomus intraradices*." *Plant and Soil* 145 (1992): 71-80.
- Hernandez_Sebastia C, Samson G, Bernier PY, Piche Y, Desjardins Y. 2000. *Glomus intraradices* causes differential changes in amino acid and starch concentrations of in vitro strawberry subjected to water stress. *New Phytologist* 148: 177-186.
- Hernandez-Sebastia C, Piche Y, Desjardins Y. 1999. Water relations of whole strawberry plantlets in vitro inoculated with *Glomus intraradices* in a tripartite culture system. *Plant Sci.* 143: 81-91.
- [Abstract](#)
- Jabaji-Hare, S.H. and Kendrick, W.B. "Response of an endomycorrhizal fungus in *Allium porrum* L. to different concentration of systemic fungicides, metalaxyl and fosetyl-Al." *Soil Biology and Biochemistry* 19 (1987): 95-99.
- Jacquelinet-Jeanmougin, J., Gianinazzi-Pearson, V., and Gianinazzi, S. "Endomycorrhizas in the Gentianaceae. II. Ultrastructural aspects of symbiont relationship in *Gentiana lutea* L." *Symbiosis* 3 (1987): 269-286.
- Jarstfer, A.G., "Effect of inoculum placement on sporulation of *Glomus intraradices* in onion root systems.," in *Mycorrhizae in the Next Decade Practical Applications and Research Priorities*, edited by D. M. Sylvia, L. L. Hung, and J. H. Graham (Gainesville: University of Florida, 1987), 27.
- Jarstfer, A.G. and Schenck, N.C. Spatial distribution of *Glomus intraradices* sporulation in onion root systems. *Phytopathology* 76, 1111. 1986. Ref Type: Abstract
- Johansen, A., Finlay, R.D., and Olsson, P.A. "Nitrogen-metabolism of external hyphae of the arbuscular mycorrhizal fungus *Glomus intraradices*." *New Phytologist* 133, no. 4 (1996): 705-712.
- Jolicoeur, M., Germette, S., Gaudette, M., Perrier, M., and Becard, G. "Intracellular pH in arbuscular mycorrhizal fungi - A symbiotic physiological marker." *Plant Physiology* 116, no. 4 (1998): 1279-1288.
- Kaldorf, M., Schmelzer, E., and Bothe, H. "Expression of maize and fungal nitrate reductase genes in arbuscular mycorrhiza." *Molecular Plant-Microbe Interactions* 11, no. 6 (1998): 439-448.

- Kjoller, R. and Rosendahl, S. "The presence of the arbuscular mycorrhizal fungus *Glomus intraradices* influences enzymatic activities of the root pathogen *Aphanomyces euteiches* in pea roots." *Mycorrhiza* 6, no. 6 (1997): 487-491.
- Klironomos, J.N. and Ursic, M. "Density-dependent grazing on the extraradical hyphal network of the arbuscular mycorrhizal fungus, *Glomus intraradices*, by the collembolan, *Folsomia candida*." *Biology and Fertility of Soils* 26, no. 3 (1998): 250-253.
- Klironomos, J.N., Ursic, M., Rillig, M., and Allen, M.F. "Interspecific differences in the response of arbuscular mycorrhizal fungi to *Artemisia tridentata* grown under elevated atmospheric CO₂." *New Phytologist* 138, no. 4 (1998): 599-605.
- Koch, K.E. and Johnson, C.R. "Photosynthate partitioning in split-root citrus seedlings with mycorrhizal and nonmycorrhizal root systems." *Plant Physiology* 75 (1984): 26-30.
- Koske, R.E. and Gemma, J.N. "Arbuscular mycorrhizal fungi in Hawaiian sand dunes: Island of Kaua." *Pacific Science* 1 (1996): 36-45.
- Lambais, M.R. and Mehdy, M.C. "Soybean roots infected by *Glomus intraradices* strains differing in infectivity exhibit differential chitinase and beta-1,3- glucanase expression." *New Phytologist* 134, no. 3 (1996): 531-538.
- Levy, Y., Syvertsen, J.P., and Nemeč, S. "Effect of drought stress and VAM on citrus transpiration and hydraulic conductivity of roots." *New Phytologist* 93 (1983): 61.
- Ludwigmuller, J., Kaldorf, M., Sutter, E.G., and Epstein, E. "Indole-3-butyric acid (IBA) is enhanced in young maize (*zea mays* l) roots colonized with the arbuscular mycorrhizal fungus *glomus intraradices*." *Plant Science* 125, no. 2 (1997): 153-162.
- Maia, L.C. and Kimbrough, J.W. "Ultrastructural studies on spores of *Glomus intraradices*." *International Journal of Plant Sciences* 155, no. 6 (1994): 689-698.
- Martin, J., Garcia-Romera, I., Ocampo, J.A., and Palma, J.M. "Superoxide dismutase and arbuscular mycorrhizal fungi: Relationship between the isoenzyme pattern and the colonizing fungus." *Symbiosis* 24, no. 2 (1998): 247-257.
- Medina-Gonzales, O.A., Sylvia, D.M., and Kretschmer, A.E. "Growth response of tropical forage legumes to inoculation of *Glomus intraradices*." *Tropical Grasslands* 21 (1987): 24-27.
- Mosse, B. "Some studies relating to "independent" growth of vesicular-arbuscular endophytes." *Canadian Journal of Botany* 66 (1988): 2533-2540.
- Murphy, P.J., Langridge, P., and Smith, S.E. "Cloning plant genes differentially expressed during colonization of roots of *Hordeum vulgare* by the vesicular- arbuscular mycorrhizal fungus *Glomus intraradices*." *New Phytologist* 135, no. 2 (1997): 291-301.
- Nemeč, S. "Longevity of microbial biocontrol agents in a planting mix amended with *Glomus intraradices*." *Biocontrol Science and Technology* 7, no. 2 (1997): 183-192.
- Nelson, S.D. "Rooting and subsequent growth of woody ornamental softwood cuttings treated with endomycorrhizal inoculum." *Journal of American Society for Horticulture Science* 112 (1987): 263-266.
- Newton, R. and Yeager, T. "Ornamental plant nutrition-mycorrhizae result in demonstration." *The Woody Ornamentalist* 10(11) (1985).

- Nouaim, R. and Chaussod, R. "Mycorrhizal Dependency of Micropropagated Argan Tree (*Argania Spinosa*): 1. Growth and Biomass Production." *Agroforestry Systems* 27, no. 1 (1994): 53-65.
- Pattinson, G.S., Smith, S.E., and Doube, B.M. "Earthworm *Aporrectodea trapezoides* had no effect on the dispersal of a vesicular-arbuscular mycorrhizal fungi, *Glomus intraradices*." *Soil Biology and Biochemistry* 29, no. 7 (1997): 1079-1088.
- Perrin, R. and Plenchette, C. "Effect of some fungicides applied as soil drenches on the mycorrhizal infectivity of 2 cultivated soils and their receptiveness to *Glomus intraradices*." *Crop Protection* 12 (1993): 127-133.
- Plenchette, C. and Morel, C. "External phosphorus requirement of mycorrhizal and non-mycorrhizal barley and soybean plants." *Biology and Fertility of Soils* 21, no. 4 (1996):303-308.
- Pinochet, J., Fernandez, C., Jaizme, M.D., and Tenoury, P. "Micropropagated banana infected with *Meloidogyne javanica* responds to *Glomus intraradices* and phosphorus." *Hortscience* 32, no. 1 (1997): 101-103.
- Pinochet, J., Camprubi, A., Calvet, C., Fernandez, C., and Kabana, R.R. "Inducing tolerance to the root-lesion nematode *Pratylenchus vulnus* by early mycorrhizal inoculation of micropropagated Myrobalan 29 C plum rootstock." *Journal Of The American Society For Horticultural Science* 123, no. 3 (1998): 342-347.
- Price, N.S., Roncadori, R.W., and Hussey, R.S. "The growth of nematode 'tolerant' and 'intolerant' soyabeans as affected by phosphorus, *Glomus intraradices* and light." *Plant Pathology* 44, no. 3 (1995): 597-603.
- Rousseau, A., Benhamou, N., Chet, I., and Piche, Y. "Mycoparasitism of the Extramatrical Phase of *Glomus intraradices* by *Trichoderma harzianum*." *Phytopathology* 86, no. 5 (1996): 434-443.
- Shumway, D.L. and Koide, R.T. "Size and reproductive inequality in mycorrhizal and nonmycorrhizal populations of *Abutilon theophrasti*." *Journal of Ecology* 83, no. 4 (1995): 613-620.
- Shumway, D.L. and Koide, R.T. "Reproductive responses to mycorrhizal colonization of *Abutilon theophrasti* Medic. plants grown for two generations in the field." *New Phytologist* 128, no. 2 (1994): 219-224.
- Smith, J.E., Johnson, K.A., and Cazares, E. "Vesicular mycorrhizal colonization of seedlings of Pinaceae and Betulaceae after spore inoculation with *Glomus intraradices*." *Mycorrhiza* 7, no. 6 (1998): 279-285.
- Smith, G.S. and Roncadori, R.W. "Response of three vesicular-arbuscular mycorrhizal fungi at four soil temperatures and their effects on cotton growth." *New Phytologist* 104 (1986): 89-95.
- St-Arnaud, M., Hamel, C., Vimard, B., Caron, M., and Fortin, J.A. "Inhibition of *Fusarium oxysporum* f.sp. *dianthi* in the non- VAM species *Dianthus caryophyllus* by co-culture with *Tagetes patula* companion plants colonized by *Glomus intraradices*." *Canadian Journal of Botany* 75, no. 6 (1997): 998-1005.
- St-Arnaud, M., Hamel, C., Vimard, B., Caron, M., and Fortin, A. Enhanced hyphal growth and spore production of the arbuscular mycorrhizal fungus *Glomus intraradices* in an in vitro system in the absence of host roots. *Mycological Research* 100, 328-332. 1996.
- St-Arnaud, M., Hamel, C., Vimard, B., Caron, M., and Fortin, J.A. "Altered growth of *Fusarium oxysporum* f.sp. *chrysanthemi* in an in vitro dual culture system with the vesicular arbuscular mycorrhizal fungus *Glomus intraradices* growing on *Daucus carota* transformed roots." *Mycorrhiza* 5, no. 6 (1995): 431-438.

Subramanian, K.S. and Charest, C. "Influence of arbuscular mycorrhizae on the metabolism of maize under drought stress." *Mycorrhiza* 5, no. 4 (1995): 273-278.

Subramanian, K.S. and Charest, C. "Arbuscular mycorrhizae and nitrogen assimilation in maize after drought and recovery." *Physiologia Plantarum* 102, no. 2 (1998): 285-296.

Sylvia, D.M. and Hubbell, D.H. "Growth and sporulation of vesicular-arbuscular mycorrhizal fungi in aeroponic and membrane systems." *Symbiosis* 1 (1986): 259-267.

Varma, A. and Schüepp, H. "Infectivity and Effectiveness of *Glomus* intraradices on Micropropagated Plants." *Mycorrhiza* 5, no. 1 (1994): 29-37.

Vilarino, A., Frey, B., and Shuepp, H. "MES [2-(n-morpholine)-ethane sulphonic acid] buffer promotes the growth of external hyphae of the arbuscular mycorrhizal fungus *glomus* intraradices in an alkaline sand." *Biology and Fertility of Soils* 25, no. 1 (1997):79-81.

Vilarino, A., Frey, B., and Shuepp, H. Production of extramatrical mycelium of the arbuscular mycorrhizal fungus *Glomus* intraradices by different plant treatments. 1995. Ref Type: Unpublished Work

Wan, M.T. and Rahe, J.E. "Impact of azadirachtin on *Glomus* intraradices and vesicular-arbuscular mycorrhiza in root inducing transferred DNA transformed roots of *Daucus carota*." *Environmental Toxicology And Chemistry* 17, no. 10 (1998):2041-2050.

Wan, M.T., Rahe, J.E., and Watts, R.G. "A new technique for determining the sublethal toxicity of pesticides to the vesicular-arbuscular mycorrhizal fungus *Glomus* intraradices." *Environmental Toxicology And Chemistry* 17, no. 7 (1998):1421-1428.

Wan, M.T., Rahe, J.E., and Wong, C. "Persistence of azadirachtin-A in two biological systems used for culturing mycorrhizal fungus *Glomus* intraradices." *J.Environ.Sci.Health B-Pestic* 32, no. 6 (1997): 929-953.

Glomus mosseae

Abdelfattah, G.M. "Functional activity of VA-mycorrhiza (*Glomus mosseae*) in the growth and productivity of soybean plants grown in sterilized soil." *Folia Microbiol Prague* 42, no. 5 (1997): 495-502.

Aldwell, F.E.B. and Hall, I.R. "Monitoring spread of *Glomus mosseae* through soil infested with *Acaulospora laevis* using serological and morphological techniques." *Transactions of the British Mycological Society* 87 (1986): 131-134.

Allen, M.F. and Boosalis, M.G. "Effects of two species of VA mycorrhizal fungi on drought tolerance of winter wheat." *New Phytologist* 93 (1983): 67-76.

Amdra-Lazcano, E., Vazquez, M.M., and Azcon, R. "Response of nitrogen-transforming microorganisms to arbuscular mycorrhizal fungi." *Biology and Fertility of Soils* 27, no. 1 (1998): 65-70.

Ames, R.N., Reid, C.P.P., Porter, L.K., and Cambardella, C. "Hyphal uptake and transport of nitrogen from two ¹⁵N-labeled sources by *Glomus mosseae*, a vesicular-arbuscular mycorrhizal fungus." *New Phytologist* 95 (1983): 381-396.

Amijee, F., Tinker, P.B., and Stribley, D.P. "Effects of phosphorus on the morphology of VA mycorrhizal root system of leek (*Allium porrum* L.)." *Plant and Soil* 119 (1990):334-336.

- Andrade, G., Mihara, K.L., Linderman, R.G., and Bethlenfalvay, G.J. "Soil aggregation status and rhizobacteria in the mycorrhizosphere." *Plant and Soil* 202, no. 1 (1998):89-96.
- Andrade, G., Linderman, R.G., and Bethlenfalvay, G.J. "Bacterial associations with the mycorrhizosphere and hyphosphere of the arbuscular mycorrhizal fungus *Glomus mosseae*." *Plant and Soil* 202, no. 1 (1998): 79-87.
- Andrade, G., Azcon, R., and Bethlenfalvay, G.J. "A rhizobacterium modifies plant and soil responses to the mycorrhizal fungus *Glomus mosseae*." *Applied Soil Ecology* 2, no. 3 (1995): 195-202.
- An, Z.-Q. and Hendrix, J.W. "Determining viability of endogonaceous spores with a vital stain." *Mycologia* 80 (1988): 259-261.
- Astrom, H., Giovannetti, M., and Raudaskoski, M. "Cytoskeletal Components in the Arbuscular Mycorrhizal Fungus *Glomus Mosseae*." *Molecular Plant-Microbe Interactions* 7 (1994): 309-312.
- Azaizeh, H.A., Marschner, H., Romheld, V., and Wittenmayer, L. "Effects of a vesicular-arbuscular mycorrhizal fungus and other soil microorganisms on growth, mineral nutrient acquisition and root exudation of soil-grown maize plants." *Mycorrhiza* 5, no. 5 (1995): 321-327.
- Azcón, R. "Germination and hyphal growth of *Glomus mosseae* in vitro: Effects of rhizosphere bacteria and cell-free culture media." *Soil Biology and Biochemistry* 19 (1987): 417-419.
- Azcon, C. and et al. "An improved procedure for the study of axenic growth of the endomycorrhizal *Glomus mosseae*." *Microbios Letters* 9 (1981): 127-131.
- Azcón-Aguilar, C. and Barea, J.M. "An improved procedure for the study of axenic growth of the endomycorrhizal fungus *Glomus mosseae*." *Microbios Letters* 9 (1979):127-131.
- Azcón-Aguilar, C., Diazrodriguez, R.M., and Barea, J.M. "Effect of soil microorganisms on spore germination and growth of vesicular-arbuscular mycorrhizal fungus *Glomus mosseae*." *Transactions of the British Mycological Society* 86 (1986): 337.
- Barea, J.M., Andrade, G., Bianciotto, V., Dowling, D., Lohrke, S., Bonfante, P., O'Gara, F., and Azcón-Aguilar, C. "Impact on arbuscular mycorrhiza formation of *Pseudomonas* strains used as inoculants for biocontrol of soil-borne fungal plant pathogens." *Applied and Environmental Microbiology* 64, no. 6 (1998): 2304-2307.
- Barea, J.M. and Azcón-Aguilar, C. "Production of plant growth-regulating substances by the vesicular-arbuscular mycorrhizal fungus *Glomus mosseae*." *Applied and Environmental Microbiology* 43 (1982): 810-813.
- Bavaresco, L. and Fogher, C. "Effect of Root Infection with *Pseudomonas fluorescens* and *Glomus mosseae* in Improving Fe-Efficiency of Grapevine Ungrafted Rootstocks." *Vitis* 31 (1992): 163-168.
- Bertheau, Y., Gianinazzi-Pearson, V., and Gianinazzi, S. "Development and expression of VA endomycorrhizas in wheat: evidence of a varietal effect." *Ann.Amelior.Plantes* 30 (1980): 67-78.
- Bethlenfalvay, G.J. and Ames, R.N. "Comparison of two methods for quantifying extraradical mycelium of vesicular-arbuscular mycorrhizal fungi." *Soil Science Society America Journal* 51 (1987): 834-837.
- Bethlenfalvay, G.J., Franson, R.L., Brown, M.S., and Mihara, K.L. "The glycine-glomus-bradyrhizobium symbiosis. IX. Nutritional, morphological and physiological responses of nodulated soybean to geographic isolates of the mycorrhizal fungus *glomus mosseae*." *Physiologia Plantarum* 76 (1989): 226-232.

- Bethlenfalvay, G.J., Franson, R.L., Dakessian, S., Brown, M.S., and Mihara, K.L. "The Glycine-Glomus-Rhizobium symbiosis. XI. Nutritional, morphological, and physiological responses of nodulated soybean to geographic isolates of the mycorrhizal fungus *Glomus mosseae*." *Physiologia Plantarum* 76 (1989): 226-232.
- Bonfante-Fasolo, P. and Schubert, A. "Spore wall architecture of *Glomus* spp." *Canadian Journal of Botany* 65 (1987): 539-546.
- Bonfante-Fasolo, P. and et al. "Cytochemical modification in the host-fungus interface during intracellular interactions in vesicular-arbuscular mycorrhizae." *Plant Sci. Letters* 22 (1981): 13-21.
- Bryan, W.C. and Ruehle, J.L. "Growth stimulation of sweetgum seedlings induced by the endomycorrhizal fungus *Glomus mosseae*." *Tree Planters Notes* 27 (1976): 9.
- Clarke, C. and Mosse, B. "Plant growth responses to vesicular-arbuscular mycorrhizae. XII. Field inoculation responses of barley at two phosphorus levels." *New Phytologist* 87 (1981): 695-703.
- Calvet, C., Barea, J.M., and Pera, J. "In vitro Interactions Between the Vesicular Arbuscular Mycorrhizal Fungus *Glomus mosseae* and Some Saprophytic Fungi Isolated from Organic Substrates." *Soil Biology and Biochemistry* 24 (1992): 775-780.
- Calvet, C., Pera, J., and Barea, J.M. "Growth response of marigold (*Tagetes erecta* L) to inoculation with *Glomus mosseae*, *Trichoderma aureoviride* and *Pythium ultimum* in a peat-perlite mixture." *Plant and Soil* 148 (1993): 1-6.
- Camprubi, A., Estaun, V., Calvet, C., and Pera--J-. "Infectivity and effectivity of *Glomus mosseae* mycorrhizae in four different species of medicinal plants." *Symbiosis* 9 (1990): 305-307.
- Camprubi, A., Pinochet, J., Calvet, C., and Estaun, V. "Effects of the Root-Lesion Nematode *Pratylenchus vulnus* and the Vesicular-Arbuscular Mycorrhizal Fungus *Glomus mosseae* on the Growth of 3 Plum Rootstocks." *Plant and Soil* 153 (1993): 223-229.
- Capaccio, C.M. and Callow, J.A. "The enzymes of polyphosphate metabolism in vesicular-arbuscular mycorrhizas." *New Phytologist* 91 (1982): 81-92.
- Carcia-Garrido, J.M. and Ocampo, J.A. "Interaction between *Glomus mosseae* and *P. syringae* in tomato plant rhizosphere." *Anales de Edafologia y Agrobiologia* 47 (1988):1679-1685.
- Carr, G.R., Hinkley, M.A., Le Tacon, F., Hepper, C.M., Jones, M.G.K., and Thomas, E.D. "Improved Hyphal growth of two species of vesicular-arbuscular mycorrhizal fungi in the presence of suspension-cultured plant cells." *New Phytologist* 101 (1985): 417-426.
- Citernes, A.S., Fortuna, P., Filippi, C., Bagnoli, G., and Giovannetti, M. "The occurrence of antagonistic bacteria in *Glomus mosseae* pot cultures." *Agronomie* 16, no. 10 (1996): 671-677.
- Cooper, K.M. and Tinker, P.B. "Translocation and transfer of nutrients in vesicular-arbuscular mycorrhizas. IV. Effect of environmental variables on movement of phosphorus." *New Phytologist* 88 (1981): 327-339.
- Cooper, K.M. and Losel, D.M. "Lipid physiology of vesicular-arbuscular mycorrhiza. I. Composition of lipids in roots of onion, clover, and ryegrass infected with *Glomus mosseae*." *New Phytologist* 80 (1978): 143-152.
- Cress, W.A., Johnson, G.V., and Barton, L.L. "The role of endomycorrhizal fungi in iron uptake by *Hilaria jamesii*." *Journal of Plant Nutrition* 9 (1986): 547-556.

- Crows, C.E., Johnson, C.R., and Joiner, J.N. "Benefits of mycorrhizae on growth and development of three woody ornamentals." *Horticultural Science* 13 (1978): 429-430.
- Daft, M.J. and El-Giahmi, A.A. "Effect of arbuscular mycorrhiza on plant growth. VIII. Effects of defoliation and light on selected hosts." *New Phytologist* 80 (1978): 365-372.
- Daniels, B.A. and Graham, S.O. "Effects of nutrition and soil extracts on germination of *Glomus mosseae* spores." *Mycologia* 68 (1976): 108-116.
- Dar, G.H., Zargar, M.Y., and Beigh, G.M. "Biocontrol of fusarium root rot in the common bean (*Phaseolus vulgaris* L) by using symbiotic *Glomus mosseae* and *Rhizobium leguminosarum*." *Microbial Ecology* 34, no. 1 (1997): 74-80.
- Dassi, B., Dumas-Gaudot, E., Asselin, A., Richard, C., and Gianinazzi, S. "Chitinase and β -1,3-glucanase isoforms expressed in pea roots inoculated with arbuscular mycorrhizal or pathogenic fungi." *European Journal of Plant Pathology* 102, no. 1 (1996): 105-108.
- Dehne, H.W. and Schönbeck, F. "The influence of endotrophic mycorrhiza on plant diseases. 3. Chitinase-activity and ornithine-cycle." *Pflanzenkrankheiten und Pflanzenschutz* 85(11) (1978): 666-678.
- Dexheimer, J.S. and et al. "Ultrastructure cytochemistry of the host-fungus interfaces in the endomycorrhizal associations *Glomus mosseae*/*Allium cepa*." *Zeitschrift Fur Pflanzenphysiologie* 92 (1979): 191-207.
- Diem, H.G. and Gauthier, D. "Effect of endomycorrhizal infection (*Glomus mosseae*) on the nodulation and growth of *Casuarina equisetifolia*." *C.R.Acad.Sci.Ser.III-III-E* 294 (1982): 215.
- Dodd, J.C. "Inter- and intraspecific variation within the morphologically-similar arbuscular mycorrhizal fungi *Glomus mosseae* and *Glomus coronatum*." *New Phytologist* 133 (1996): 113-122.
- Douds, D.D. "A procedure for the establishment of *Glomus mosseae* in dual culture with Ri T-DNA-transformed carrot roots." *Mycorrhiza* 7, no. 2 (1997): 57-61.
- Edwards, S.G., Fitter, A.H., and Young, J.W. "Quantification of an arbuscular mycorrhizal fungus, *Glomus mosseae*, within plant roots by competitive polymerase chain reaction." *Mycological Research* 101, no. Part:12 (1997): 1440-1444.
- Estaun, M.V. "Effect of sodium chloride and mannitol on germination and hyphal growth of the vesicular-arbuscular mycorrhizal fungus *Glomus Mosseae*." *Agriculture, Ecosystems and Environment* 29 (1990): 123-129.
- Filippi, C., Bagnoli, G., Citernesi, A.S., and Giovannetti, M. "Ultrastructural spatial distribution of bacteria associated with sporocarps of *Glomus mosseae*." *Symbiosis* 24, no. 1 (1998): 1-12.
- Fracchia, S., Mujica, M.T., Garcia-Romera, I., Garcia-Garrido, J.M., Martin, J., Ocampo, J.A., and Godeas, A. "Interactions between *Glomus mosseae* and arbuscular mycorrhizal sporocarp-associated saprophytic fungi." *Plant and Soil* 200, no. 2 (1998): 131-137.
- Ganry, F., Diem, H.G., and Dommergues, Y.R. "Effect of inoculation with *Glomus mosseae* on nitrogen fixation by field grown soybeans." *Plant and Soil* 68 (1982):321-329.
- Ganry, F., Diem, H.G., Wey, J., and Dommergues, Y.R. "Inoculation with *Glomus mosseae* improves N₂ fixation by field-grown soybeans." *Biology and Fertility of Soils* 1 (1985): 15-23.
- Garcia-Garrido, J.M., Garcia-Romera, I., Parra-Garcia, M.D., and Ocampo, J.A. "Purification of an arbuscular mycorrhizal endoglucanase from onion roots colonized by *Glomus mosseae*." *Soil Biology and Biochemistry* 28, no. 10-11 (1996): 1443-1449.

- Garcia-Romera, I., Garcia-Garrido, J.M., Martin, J., Fracchia, S., Mujica, M.T., Godeas, A., and Ocampo, J.A. "Interactions between saprotrophic *Fusarium* strains and arbuscular mycorrhizas of soybean plants." *Symbiosis* 24, no. 2 (1998): 235-245.
- Garcia-Romera, I. and Ocampo, J.A. "Comparative study of the efficiency of *G. mosseae* and indigenous VA endophytes from two soils of Granada (Spain)." *Annales de Edafologia y Agrobiologia* 46 (1987): 713-720.
- Garcia-Garrido, J.M., Garcia-Romera, I., and Ocampo, J.A. "Cellulase Production by the Vesicular Arbuscular Mycorrhizal Fungus *Glomus mosseae* (Nicol & Gerd) Gerd and Trappe." *New Phytologist* 121 (1992): 221-226.
- Garcia-Garrido, J.M. and Ocampo, J.A. "Interaction between *Glomus mosseae* and *Erwinia carotovora* and its effects on the growth of tomato plants." *New Phytologist* 110 (1989): 551-555.
- George, E., Häussler, K.U., Vetterlein, D., Gorgus, E., and Marschner, H. "Water and nutrient translocation by hyphae of *Glomus mosseae*." *Canadian Journal of Botany* 70 (1992): 2130-2137.
- Gianinazzi, S., Gianinazzi-Pearson, V., and Dexheimer, J. "Enzymatic studies on the metabolism of vesicular-arbuscular mycorrhiza. III. Ultrastructural localization of acid and alkaline phosphatases in onion roots infected by *Glomus mosseae* (Nicol. and Gerd.) Gerd. and Trappe." *New Phytologist* 82 (1979): 127-132.
- Giovannetti, M., Avio, L., Sbrana, C., and Citernes, A.S. "Factors Affecting Appressorium Development in the Vesicular Arbuscular Mycorrhizal Fungus *Glomus-Mosseae* (Nicol gerd) gerd & Trappe." *New Phytologist* 123 (1993):115-122.
- Giovannetti, M. and Hepper, C.M. "Vesicular-arbuscular mycorrhizal infection in *Hedysarum cornarium* and *Onobrychis viciaefolia*: host-endophyte specificity." *Soil Biology and Biochemistry* 17 (1985): 899-900.
- Giovannetti, M., Sbrana, C., and Logi, C. "Early processes involved in host recognition by arbuscular mycorrhizal fungi." *New Phytologist* 127, no. 4 (1994): 703-709.
- Green, N.E., Graham, S.O., and Schenck, N.C. "The influence of pH on the germination of vesicular-arbuscular mycorrhizal spores." *Mycologia* 68 (1976): 929-934.
- Gueye, M., Diem, H.G., and Dommergues, Y.R. "Variation in N₂ fixation, N and P content of mycorrhizal *Vigna unguiculata* in relation to the progressive development of extraradical hyphae of *Glomus mosseae*." *MIRCEN J.* 3 (1987): 75-86.
- Hawkins, H.J. and George, E. "Hydroponic culture of the mycorrhizal fungus *Glomus mosseae* with *Linum usitatissimum* L., *Sorghum bicolor* L. and *Triticum aestivum* L." *Plant and Soil* 196, no. 1 (1997): 143-149.
- Hepper, C.M., Sen, R., Azcón-Aguilar, C., and Grace, C.A. "Variation in certain isozymes amongst different geographical isolates of the vesicular-arbuscular mycorrhizal fungi *Glomus clarum*, *Glomus monosporum* and *Glomus mosseae*." *Soil Biology and Biochemistry* 20 (1988): 51-59.
- Herskowitz, J.M. and Estey, R.H. "Endogonaceae from Quebec soils." *Canadian Journal of Botany* 56 (1977): 1095-1098.
- Hetrick, B.A.D., Kitt, D.G., and Wilson, G.T. "The influence of phosphorus fertilization, drought, fungal species, and nonsterile soil on mycorrhizal growth response in tall grass prairie plants." *Canadian Journal of Botany* 64 (1986): 1199-1203.

- Hetrick, B.A.D. and Bloom, J. "The influence of host plant on production and colonization ability of vesicular-arbuscular mycorrhizal spores." *Mycologia* 78 (1986): 32-36.
- Hetrick, B.A.D., Hetrick, J.A., and Bloom, J. "Interaction of mycorrhizal infection, P level and moisture stress in growth of field corn." *Canadian Journal of Botany* 62 (1984):2267-2271.
- Ho, I. and Trappe, J.M. "Nitrate reducing capacity of two vesicular-arbuscular mycorrhizal fungi." *Mycologia* 67 (1975): 886-888.
- Islam, R. and Ayanaba, A. "Effect of seed inoculation and pre-infecting cowpea (*Vigna unguiculata*) with *Glomus mosseae* on growth and seed yield of the plants under field conditions." *Plant and Soil* 61 (1981): 341-350.
- Jacquelinet-Jeanmougin, J., Gianinazzi-Pearson, V., and Gianinazzi, S. "Endomycorrhizas in the Gentianaceae. II. Ultrastructural aspects of symbiont relationship in *Gentiana lutea* L." *Symbiosis* 3 (1987): 269-286.
- Jaizme-Vega, M.C., Tenoury, P., Pinochet, J., and Jaumot, M. "Interactions between the root-knot nematode *Meloidogyne incognita* and *Glomus mosseae* in banana." *Plant and Soil* 196, no. 1 (1997): 27-35.
- Joner, E.J. and Leyval, C. "Uptake of ¹⁰⁹Cd by roots and hyphae of a *Glomus mosseae* / *Trifolium subterraneum* mycorrhiza from soil amended with high and low concentrations of cadmium." *New Phytologist* 135, no. 2 (1997): 353-360.
- Karagiannidis, N. and Hadjisavva-Zinoviadi, S. "The mycorrhizal fungus *Glomus mosseae* enhances growth, yield and chemical composition of a durum wheat variety in 10 different soils." *Nutrient Cycling In Agroecosystems* 52, no. 1 (1998): 1-7.
- Khan, A.G. "Inoculum density of *Glomus mosseae* and growth of onion plants in unsterilized bituminous coal spoil." *Soil Biology and Biochemistry* 20 (1988): 749-753.
- Kiernan, J.M., Hendrix, J.W., Stoltz, L.P., and Maronek, D.M. "Characterization of strawberry plants produced by tissue culture and infected with specific mycorrhizal fungi." *Horticultural Science* 19 (1984): 883-884.
- Kucey, R.M.N. and Paul, E.A. "Vesicular arbuscular mycorrhizal spore populations in various Saskatchewan soils and the effect of inoculation with *Glomus mosseae* on faba bean growth in greenhouse and field trials." *Can.J.Soil Sci.* 63 (1983): 87-95.
- Lanfranco, L., Wyss, P., Marzachi, C., and Bonfante, P. "Generation of RAPD-PCR primers for the identification of isolates of *Glomus mosseae*, an arbuscular mycorrhizal fungus." *Molecular Ecology* 4 (1995): 61-68.
- LeTacon, F., Skinner, F.A., and Mosse, B. "Spore germination and hyphal growth of a vesicular-arbuscular mycorrhizal fungus, *Glomus mosseae* (Gerdemann and Trappe) under decreased oxygen and increased carbon dioxide concentrations." *Canadian Journal Microbiology* 29 (1983): 1280-1285.
- Leyval, C., Turnau, K., and Haselwandter, K. "Effect of heavy metal pollution on mycorrhizal colonization and function: physiological, ecological and applied aspects." *Mycorrhiza* 7, no. 3 (1997): 139-153.
- Lloyd-Macgilp, S.A., Chambers, S.M., Dodd, J.C., Fitter, A.H., Walker, C., and Young, J.P.W. "Diversity of the ribosomal internal transcribed spacers within and among isolates of *glomus-mosseae* and related mycorrhizal fungi." *New Phytologist* 133, no. 1 (1996): 103-111.
- Liyanage, H.D. Effects of phosphorus nutrition and host species on root colonization and sporulation by vesicular-arbuscular (VA) mycorrhizal fungi in sand-vermiculite medium.(University of Florida, Gainesville: M.S. Thesis, 1989).

- Luedders, V.D., Carling, D.E., and Brown, M.F. "Effect of soybean plant growth on spore production by *Glomus mosseae*." *Plant and Soil* 53 (1979): 393-397.
- Macdonald, R.M. and Lewis, M. "The occurrence of some acid phosphatases and dehydrogenases in vesicular-arbuscular fungus *Glomus mosseae*." *New Phytologist* 80 (1978): 135-142.
- Mcallister, C.B., Garcia_Garrido, J.M., Garcia-Romera, I., Godeas, A., and Ocampo, J.A. "Interaction between *Alternaria alternata* or *Fusarium equiseti* and *Glomus mosseae* and its effects on plant growth." *Biology and Fertility of Soils* 24, no. 3 (1997):301-305.
- Mcallister, C.B., Garcia-Romera, I., Godeas, A., and Ocampo, J.A. "Interactions between *Trichoderma koningii*, *Fusarium solani* and *Glomus mosseae*: Effects on plant growth, arbuscular mycorrhizas and the saprophyte inoculants." *Soil Biology and Biochemistry* 26, no. 10 (1994): 1363-1367.
- Martin, J., Garcia-Romera, I., Ocampo, J.A., and Palma, J.M. "Superoxide dismutase and arbuscular mycorrhizal fungi: Relationship between the isoenzyme pattern and the colonizing fungus." *Symbiosis* 24, no. 2 (1998): 247-257.
- Meier, R. and Charvat, I. "Peridial Development in *Glomus mosseae* (Glomaceae)." *American Journal of Botany* 79 (1992): 928-936.
- Meier, R. and Charvat, I. "Germination of *Glomus mosseae* Spores - Procedure and Ultrastructural Analysis." *International Journal of Plant Sciences* 153 (1992):541-549.
- Millner, P.D. and Reynolds, S.R. Production and specificity of monoclonal antibodies to *Glomus mosseae*. *Phytopathology* 78, 1604. 1988. Ref Type: Abstract
- Mohr, U., Lange, J., Boller, T., Wiemken, A., and Vogeli-Lange, R. "Plant defence genes are induced in the pathogenic interaction between bean roots and *Fusarium solani*, but not in the symbiotic interaction with the arbuscular mycorrhizal fungus *Glomus mosseae*." *New Phytologist* 138, no. 4 (1998): 589-598.
- Mosse, B. and et al. "Plant growth responses to vesicular-arbuscular mycorrhizae. XIII. Spread of an introduced vesicular-arbuscular endophyte in the field and residual growth effects of inoculation in the second year." *New Phytologist* 90 (1982): 521.
- Mugnier, J. and Mosse, B. "Spore germination and viability of vesicular-arbuscular mycorrhizal fungus *Glomus mosseae*." *Transactions of the British Mycological Society* 88 (1987): 411-413.
- Mugnier, J. and Mosse, B. "Vesicular-arbuscular mycorrhizal infection in transformed root-inducing T-DNA roots grown axenically." *Phytopathology* 77 (1987): 1045-1050.
- Nemec, S. and O'Bannon, J.H. "Response of *Citrus aurantium* to *Glomus etunicatum* and *Glomus mosseae* after soil treatment with selected fumigants." *Plant and Soil* 26 (1979): 351-361.
- Nemec, S. and O'Bannon, J.H. "Response of *Citrus aurantium* to *Glomus etunicatus* and *Glomus mosseae* after soil treatment with selective fumigants." *Plant and Soil* 53 (1979):351-359.
- Pacovsky, R.S. and Fuller, G. "Development of two endomycorrhizal symbioses on soybean and comparison with phosphorus fertilization." *Plant and Soil* 95 (1986):361-377.
- Paradis, R., Dalpe, Y., and Charest, C. "The combined effect of arbuscular mycorrhizas and short-term cold exposure on wheat." *New Phytologist* 129, no. 4 (1995): 637-642.
- Parra-Garcia, M.D., Glenn, M.G., and Ocampo, J.A. "Absence of VA Colonization in *Oxalis pes-caprae* Inoculated with *Glomus mosseae*." *Plant and Soil* 145 (1992): 298-300.

- Pattinson, G.S., Warton, D.I., Misman, R., and McGee, P.A. "The fungicides Terrazole and Terraclor and the nematicide Fenamiphos have little effect on root colonisation by *Glomus mosseae* and growth of cotton seedlings." *Mycorrhiza* 7, no. 3 (1997):155-159.
- Parvathi, K., Venkateswarlu, k., and Rao, A.S. "Toxicity of soil-applied fungicides and gypsum to the vesicular-arbuscular mycorrhizal fungus *Glomus mosseae* in groundnut." *Canadian Journal of Botany* 63 (1985): 1673.
- Paul, E.A. and Kucey, R.M.N. "Carbon flows in plant microbial associations." *Science* 213 (1981): 473-474.
- Pinochet, J., Camprubi, A., Calvet, C., Fernandez, C., and Kabana, R.R. "Inducing tolerance to the root-lesion nematode *Pratylenchus vulnus* by early mycorrhizal inoculation of micropropagated Myrobalan 29 C plum rootstock." *Journal Of The American Society For Horticultural Science* 123, no. 3 (1998): 342-347.
- Pinochet, J., Camprubi, A., and Calvet, C. "Effects of the Root-Lesion Nematode *Pratylenchus-Vulnus* and the Mycorrhizal Fungus *Glomus mosseae* on the Growth of EMLA- 26 Apple Rootstock." *Mycorrhiza* 4 (1993): 79-83.
- Ponder, F.Jr. "Effect of three weeds on the growth and mycorrhizal infection of black walnut seedlings." *Canadian Journal of Botany* 64 (1986): 1888-1892.
- Posta, K. and Fuleky, G. "The effect of phosphorus on the mycorrhizal colonization of maize by *Glomus mosseae* (Nicol. Gerd)." *Novenytermeles* 46, no. 6 (1997): 573-582.
- Posta, K., Marschner, H., and Römheld, V. "Manganese reduction in the rhizosphere of mycorrhizal and nonmycorrhizal maize." *Mycorrhiza* 5, no. 2 (1994): 119-124.
- Rahman, M.K. and Parsons, J.W. "Effects of inoculation with *glomus mosseae*, *azorhizobium caulinodans* and rock phosphate on the growth of and nitrogen and phosphorus accumulation in *sesbania rostrata*." *Biology and Fertility of Soils* 25, no. 1 (1997): 47-52.
- Rao, M.S., Reddy, P.P., and Mohandas, S. "Effect of integration of endomycorrhiza (*Glomus mossae*) and neem cake on the control of root-knot nematode on tomato." *Z.Pflanzenkrank.Pflanzen.* 102, no. 5 (1995): 526-529.
- Reinsvold, R.J. and Reeve, F.B. "The mycorrhizae of *Juniperus osteosperma*: Identity of the vesicular-arbuscular mycorrhizal symbiont, and resynthesis of VA mycorrhizae." *Mycologia* 78 (1986): 108-113.
- Saito, M., Stribley, D.P., and Hepper, C.M. "Succinate Dehydrogenase Activity of External and Internal Hyphae of a Vesicular-Arbuscular Mycorrhizal Fungus, *Glomus mosseae* (Nicol&gerd) Gerdmann and Trappe, During Mycorrhizal Colonization of Roots of Leek (*Allium-Porrum* L), as Revealed by Insitu Histochemical Staining." *Mycorrhiza* 4 (1993): 59-62.
- Samra, A., Dumas-Gaudot, E., and Gianinazzi, S. "Detection of symbiosis-related polypeptides during the early stages of the establishment of arbuscular mycorrhiza between *Glomus mosseae* and *Pisum sativum* roots." *New Phytologist* 135, no. 4 (1997): 711-722.
- Scharff, A.M., Jakobsen, I., and Rosendahl, L. "The effect of symbiotic microorganisms on phytoalexin contents of soybean roots." *Journal of Plant Physiology* 151, no. 6 (1997): 716-723.
- Schubert, A. and Hayman, D.S. "Plant growth responses to vesicular-arbuscular mycorrhiza XVI. Effectiveness of different endophytes at different levels of soil phosphate." *New Phytologist* 103 (1986): 79-90.

- Schwob, I., Ducher, M., Sallanon, H., and Coudret, A. "Growth and gas exchange responses of *Hevea brasiliensis* seedlings to inoculation with *Glomus mosseae*." *Trees - Structure and Function* 12, no. 4 (1998): 236-240.
- Siddiqui, Z.A. and Mahmood, I. "Effect of a plant growth promoting bacterium, an AM fungus and soil types on the morphometrics and reproduction of *Meloidogyne javanica* on tomato." *Applied Soil Ecology* 8, no. 1-3 (1998): 77-84.
- Sikora, R.A. "Effect of the endotrophic mycorrhizal fungus, *Glomus mosseae*, on the host-parasite relationship of *Meloidogyne incognita* in tomato." *Pflanzenkrankheiten und Pflanzenschutz* 85 (1978): 197-202.
- Smith, S.E., Walker, N.A., and Tester, M. "The apparent width of the rhizosphere of *Trifolium subterraneum* L. for vesicular-arbuscular infections: effects of time and other factors." *New Phytologist* 104 (1986): 547-558.
- Smith, S.E., St.John, B.J., Smith, F.A., and Bromley, J.L. "Effects of mycorrhizal infection on plant growth, nitrogen and phosphorus nutrition in glasshouse-grown *Allium cepa* L." *New Phytologist* 103 (1986): 359-373.
- Staddon, P.L., Graves, J.D., and Fitter, A.H. "Effect of enhanced atmospheric CO₂ on mycorrhizal colonization by *Glomus mosseae* in *Plantago lanceolata* and *Trifolium repens*." *New Phytologist* 139, no. 3 (1998): 571-580.
- Stahl, P.D. and Christensen, M. "Population variation in the mycorrhizal fungus *Glomus mosseae*: Breadth of environmental tolerance." *Mycological Research* 95 (1991): 300-307.
- Stahl, P.D., Christensen, M., and Williams, S.E. "Population variation in the mycorrhizal fungus *Glomus mosseae*: uniform garden experiments." *Mycological Research* 94 (1990): 1070-1076.
- Siddiqui, Z.A. and Mahmood, I. "Biological-Control of *Heterodera*-Cajani and *Fusarium-Udum* on Pigeonpea by *Glomus-Mosseae*, *Trichoderma-Harzianum*, and *Verticillium-Chlamydosporium*." *Israel Journal of Plant Sciences* 44, no. 1 (1996): 49-56.
- Sylvia, D.M. and Hubbell, D.H. "Growth and sporulation of vesicular-arbuscular mycorrhizal fungi in aeroponic and membrane systems." *Symbiosis* 1 (1986): 259-267.
- Tahiri-Alaoui, A. and Antoniw, J.F. "Cloning of genes associated with the colonization of tomato roots by the arbuscular mycorrhizal fungus *Glomus mosseae*." *Agronomie* 16, no. 10 (1997): 699-707.
- Thomson Cason, K.M., Hussey, R.B., and Roncadori, R.W. "Interaction of vesicular-arbuscular mycorrhizal fungi and phosphorus with *Meloidogyne incognita* on tomato." *J.Nematol.* 15 (1983): 410-417.
- Trotta, A., Varese, G.C., Gnani, E., Fusconi, A., Sampo, S., and Berta, G. "Interactions between the soilborne root pathogen *Phytophthora nicotianae* var *parasitica* and the arbuscular mycorrhizal fungus *Glomus mosseae* in tomato plants." *Plant and Soil* 185, no. 2 (1996): 199-209.
- Utkhede, R.S., Li, T.S.C., and Smith, E.M. "The Effect of *Glomus mosseae* and *Enterobacter aerogenes* on Apple Seedlings Grown in Apple Replant Disease Soil." *Phytopathologische Zeitschrift* (1992): 281-288.
- Verkade, S.D. "Use of colloidal silica solutions in the isolation of spores of *Glomus mosseae*." *Mycologia* 80 (1988): 109-110.
- Verkade, S.D. and Hamilton, D.F. "Effects of *Glomus fasciculatum* or *Glomus mosseae* on growth of *Liriodendron tulipifera* under high fertility." *J.Enviro.Hortic.* 3 (1985): 101-103.

- Vierheilig, H., Alt, M., Lange, J., Gutrella, M., Wiemken, A., and Boller, T. "Colonization of transgenic tobacco constitutively expressing pathogenesis-related proteins by the vesicular- arbuscular mycorrhizal fungus *Glomus mosseae*." *Applied and Environmental Microbiology* 61, no. 8 (1995): 3031-3034.
- Vierheilig, H., Alt, M., Mader, P., Boller, T., and Wiemken, A. "Spreading of *Glomus mosseae*, a vesicular-arbuscular mycorrhizal fungus, across the rhizosphere of host and non- host plants." *Soil Biology and Biochemistry* 27, no. 8 (1995): 1113-1115.
- Vierheilig, H., Alt, M., Mohr, U., Boller, T., and Wiemken, A. "Ethylene Biosynthesis and Activities of Chitinase and beta- 1,3- Glucanase in the Roots of Host and Non-Host Plants of Vesicular- Arbuscular Mycorrhizal Fungi After Inoculation with *Glomus mosseae*." *Journal of Plant Physiology* 143 (1994): 337-343.
- Vierheilig, H., Alt, M., Neuhaus, J.M., Boller, T., and Wiemken, A. "Colonization of Transgenic *Nicotiana sylvestris* Plants, Expressing Different Forms of *Nicotiana tabacum* Chitinase, by the Root Pathogen *Rhizoctonia solani* and by the Mycorrhizal Symbiont *Glomus-Mosseae*." *Molecular Plant-Microbe Interactions* 6 (1993): 261-264.
- Vilarino, A. and Sainz, M.J. "Treatment of *Glomus mosseae* propagules with 50% sucrose increases spore germination and inoculum potential." *Soil Biology and Biochemistry* 29, no. 9-10 (1997): 1571-1573.
- Weissenhorn, I. and Leyval, C. "Root colonization of maize by a Cd-sensitive and a Cd- tolerant *Glomus mosseae* and cadmium uptake in sand culture." *Plant and Soil* 175, no. 2 (1995): 233-238.
- Wilson, G.W.T., Hetrick, B.A.D., and Kitt, D.G. "Suppression of mycorrhizal growth response of big bluestem by non-sterile soil." *Mycologia* 80 (1988): 338-343.
- Wong, J.J. and Marschner, H. "Effect of nitrogen supply on spore germination and hyphal growth of *Glomus mosseae* in vitro and in the rhizosphere of soybeans." *Angewandte Botanik* 62 (1988): 169-181.
- Wyss, P., Boller, T., and Wiemken, A. "Phytoalexin response is elicited by a pathogen (*rhizoctonia solani*) but not by a mycorrhizal fungus (*glomus mosseae*) in soybean roots." *Experientia* 47 (1991): 395-399.
- Wyss, P., Boller, T., and Wiemken, A. "Glyceollin production in soybean during the process of infection by *Glomus mosseae* and *Rhizoctonia solani*." *Agriculture, Ecosystems and Environment* 29 (1990): 451-456.
- Wyss, P., Mellor, R.B., and Wiemken, A. "Vesicular-arbuscular mycorrhizas of wild-type soybean and non-nodulating mutants with *Glomus mosseae* contain symbiosis-specific polypeptides (mycorrhizins), immunologically cross-reactive with nodulins." *Planta* 182 (1990): 22-26.
- Xie, Z.P., Muller, J., Wiemken, A., Broughton, W.J., and Boller, T. "Nod factors and tri-iodobenzoic acid stimulate mycorrhizal colonization and affect carbohydrate partitioning in mycorrhizal roots of *Lablab purpureus*." *New Phytologist* 139, no. 2 (1998): 361-366.
- Zak, J.C., Danielson, R.M., and Parkinson, D. "Mycorrhizal fungal spore numbers and species occurrence in two amended mine spoils in Alberta, Canada." *Mycologia* 74 (1982): 785-792.

Rhizopogon

- Berch, S.M., and Roth, A.L.
1993., *Can. J. For. Res.* 23:1711-1715.
Ectomycorrhizae and growth of Douglas-fir seedlings preinoculated with *Rhizopogon vinicolor* and outplanted on eastern Vancouver Island.

- Castellano, M.A.
1985., In, Molina, R. (ed.). Proc. 6th North American Conference on Mycorrhizae. For. Res. Lab., Corvallis, Ore. p. 211.
Basidiospores of *Rhizopogon vinicolor* and *Rhizopogon colossus* as ectomycorrhizal inoculum.
- Castellano, M.A., Trappe, J.M., and Molina, R.
1985., Can. J. For. Res. 15:10-13.
Inoculation of container-grown Douglas-fir seedlings with basidiospores of *Rhizopogon vinicolor* and *Rhizopogon colossus*: effects of fertility and spore application rate.
- Donald, D.G.M.
1979., In, Reid, C.P.P. (ed.). Abstr. of the 4th North American Conference on Mycorrhizae. Fort Collins, Colorado. June 24-28, 1979. p. 25.
A comparison between the efficiency of *Rhizopogon luteolus* and *Pisolithus tinctorius* as mycorrhizal fungi on pinus.
- Duñabeitia, M.K., Hormilla, S., and Peña, J.I.
1990., In, Reisinger, A., & Bresinsky, A. (eds.). Fourth International Mycological Congress (IMC4). Regensburg, Germany. p. 180.
Comparison of various isolates of the ectomycorrhizal fungi *Rhizopogon roseolus* for growth rate and enzyme activity.
- Chu-Chou, M., and Grace, L.J.
1984., New Zeal. J. For. Sci. 22:35-41.
Cultural characteristics of *Rhizopogon* spp. associated with *Pinus radiata* seedlings.

Seven cultural types of *Rhizopogon* (from at least two species, *R. luteolus* Fr. and *R. rubestens* Tul.) were isolated from sporocarps, and/or mycorrhizas of *Pinus radiata* D. Don seedlings, and their cultural characteristics described. The factors that determine the distribution of the different types in 14 nurseries in the North Island of New Zealand are not clear.
- Chu-Chou, M., and Grace, L.J.
1985., New Zeal. J. Bot. 23:417-424.
Comparative efficiency of the mycorrhizal fungi *Laccaria laccata*, *Hebeloma crustuliniforme* and *Rhizopogon* species on growth of *radiata* pine seedlings.

The efficiency of *Laccaria laccata* (Scop. ex Fr.) Berk. & Br. and *Hebeloma crustuliniforme* (Bull. ex St. Am.) Quél. was compared with that of *Rhizopogon* spp. in promoting *radiata* pine seedling growth and nutrient uptake. The results showed that *Rhizopogon* spp. were more efficient growth-promoting mycorrhizal fungi than *L. laccata* and *H. crustuliniforme* although seedlings inoculated with *L. laccata* showed a better early height response between 4 to 7 months. *Hebeloma crustuliniforme* was a thorough root colonizer but it did not perform well in promoting seedling growth.
- Dasilva, E.J., Henriksen, L.E., and Udris, M.
1977., Trans. Brit. Mycol. Soc. 68:434-437.
Growth responses of mycorrhizal *Boletus* and *Rhizopogon* species to pesticides.
- Gbadegesin, R.A.
1990., For. Ecol. Manage. 37:303-307.
Effect of the ectomycorrhizal fungi *Rhizopogon luteolus* and *Pisolithus tinctorius* on growth of *Pinus oocarpa* in Nigeria.

La Loue, M., and Hall, R.H.
1973., *Plant Physiol.* 51:559-562.

Cytokinins in *Rhizopogon roseolus*. Secretion of N-[9-(B-D-ribofuranosyl-9H) Purin-6-ylcarbamoyl] threonine into the culture medium.

Li, C.Y., and Castellano, M.A.
1987., *Trans. Brit. Mycol. Soc.* 88:563-566.

Azospirillum isolated from within sporocarps of the mycorrhizal fungi *Hebeloma crustuliniforme*, *Laccaria laccata* and *Rhizopogon vinicolor*.

Massicotte, H.B., Melville, L.H., Peterson, R.L., and Molina, R.
1993., In, Peterson, L., & Schelkle, M. (eds.). *Proc. 9th North American Conference on Mycorrhizae*. August 8-12, 1993. Guelph, Ontario, Canada. p. 122.

Comparative morphology and anatomy of ectomycorrhizae synthesized between *Rhizopogon* species on *Ponderosa* pine (*Pinus ponderosa*) and Douglas-fir (*Pseudotsuga menziesii*).

Massicotte, H.B., Tackaberry, L.E., Chanway, C.P., and Holl, F.B.
1993., In, Peterson, L., & Schelkle, M. (eds.). *Proc. 9th North American Conference on Mycorrhizae*. August 8-12, 1993. Guelph, Ontario, Canada. p. 65.

A field assessment of bacterial communities in *Cenococcum* and *Rhizopogon* ectomycorrhizae on Douglas-fir using the Biolog© system.

Mohan, V., Natarajan, K., and Ingleby, K.
1993., *Mycorrhiza* 3:51-56.

Anatomical studies on ectomycorrhizas. III. The ectomycorrhizas produced by *Rhizopogon luteolus* and *Scleroderma citrinum* on *Pinus patula*.

Ectomycorrhizas of 5-month-old *Pinus patula* plants grown in autoclaved shola soil (forest soil) inoculated with basidiospores of *Rhizopogon luteolus* and *Scleroderma citrinum* are described. The main emphasis is on the organisation of the mantle tissue as seen in plan view and the features of associated hyphae and strands. The different layers in the mantle produced by the different fungi are described and illustrated.

Ogawa, M., Yambe, Y., and Sugiura, G.
1983., In, *Abstracts of the Third International Mycological Congress (IMC3)*. Tokyo, Japan. p. 577.

Cultivation of the hypogeous mushroom, *Rhizopogon rubescens* by wood charcoal.

Torres, P., and Honrubia, M.
1994., *Ann. Sci. For* 51:521-528

Inoculation of containerized *Pinus halepensis* (Miller) seedlings with basidiospores of *Pisolithus arhizus* (Pers) Rauschert, *Rhizopogon roseolus* (Corda) Th M Fr and *Suillus collinitus* (Fr) O Kuntze

Pinus halepensis Miller seedlings grown in containers were inoculated with 3 different basidiospore concentrations of *Pisolithus arhizus* (Pers) Rauschert, *Rhizopogon roseolus* (Corda) Th M Fr and *Suillus collinitus* (Fr) O Kuntze, in sterile and unsterilized substrate. Six months after germination, the seedlings were evaluated for ectomycorrhizal development and fungal species were isolated from any ectomycorrhizas synthesized. Height, dry weight and percentages of ectomycorrhizas were recorded. There were no significant differences between the 3 inoculated fungal species used on the seedling growth. The highest mean values of height, dry weight and percentage of ectomycorrhizas were obtained with seedlings inoculated with *Pisolithus arhizus* in sterile substrate.

Trappe, J.M.

1975., *Nova Hedwigia Beih.* 51:279-310.

A revision of the genus *Alpova* with notes on *Rhizopogon* and the Melanogastraceae.

Zak, B.

1971., *Can. J. Bot.* 49:1079-1084.

Characterization and classification of mycorrhizae of Douglas-fir. II. *Pseudotsuga menziesii* + *Rhizopogon vinicolor*.

Pisolithus tinctorius

Aggangan, N.S., Dell, B., and Malajczuk, N. "Effects of chromium and nickel on growth of the ectomycorrhizal fungus *Pisolithus* and formation of ectomycorrhizas on *Eucalyptus urophylla* S.T. Blake." *Geoderma* 84, no. 1-3 (1998): 15-27.

Aggangan, N.S., Dell, B., Malajczuk, N., and Delacruz, R.E. "Soil Fumigation and Phosphorus Supply Affect the Formation of *Pisolithus Eucalyptus-Urophylla* Ectomycorrhizas in 2 Acid Philippine Soils." *Plant and Soil* 180, no. 2 (1996): 259-266.

Albrecht, C., Burgess, T., Dell, B., and Lapeyrie, F. "Chitinase and peroxidase activities are induced in eucalyptus roots according to aggressiveness of Australian ectomycorrhizal strains of *Pisolithus* sp." *New Phytologist* 127 (1994): 217-222.

Anderson, I.C., Chambers, S.M., and Cairney, J.W.G. "Use of molecular methods to estimate the size and distribution of mycelial individuals of the ectomycorrhizal basidiomycete *Pisolithus tinctorius*." *Mycological Research* 102, no. Part:3 (1998): 3-300.

Anderson, I.C., Chambers, S.M., and Cairney, J.W.G. "Molecular determination of genetic variation in *Pisolithus* isolates from a defined region in New South Wales, Australia." *New Phytologist* 138, no. 1 (1998): 151-162.

Anunciacao, C.E., Guimaraes, W.V., Araujo, E.F., Muchovej, R.M.C., and Souza, D.R.N. "Production and regeneration of protoplasts of *Pisolithus tinctorius*." *Biotechnol.Tech.* 4 (1990): 215-220.

Ashford, A.E. "Dynamic pleiomorphic vacuole systems: Are they endosomes and transport compartments in fungal hyphae?" *Advances in Botanical Research* 28 (1998): 119-159.

Ashford, A.E., Ryde, S., and Barrow, K.D. "Demonstration of a Short Chain Polyphosphate in *Pisolithus Tinctorius* and the Implications for Phosphorus Transport." *New Phytologist* 126 (1994): 239-247.

Alvarez, I.F. and Trappe, J.M. "Effect of application rate and cold soaking pretreatment of *Pisolithus* spores on effectiveness as nursery inoculum on western conifers." *Canadian Journal of Forest Research* 13 (1983): 533-537.

Ba, A.M., Garbaye, J., and Dexheimer, J. "The Influence of Culture Conditions on Mycorrhiza Formation Between the Ectomycorrhizal Fungus *Pisolithus* Sp and *Azelia africana* Sm Seedlings." *Mycorrhiza* 4 (1994): 121-129.

Bailey, S.R. and Peterson, R.L. "Ectomycorrhiza synthesis between isolated roots of *Eucalyptus pilularis* and *Pisolithus tinctorius*." *Canadian Journal of Botany* 66 (1988): 1237-1239.

- Baser, C.M., Garrett, H.E., Mitchell, R.J., Cox, G.S., and Starbuck, C.J. "Indobutyric acid and ectomycorrhizal inoculation increase lateral root initiation and development of container-grown black oak seedlings." *Canadian Journal of Forest Research* 17 (1987):36-39.
- Baumert, A., Schumann, B., Porzel, A., Schmidt, J., and Strack, D. "Triterpenoids from *Pisolithus tinctorius* isolates and ectomycorrhizas." *Phytochemistry* 45, no. 3 (1997): 499-504.
- Beckjord, P.R., Smith, D.W., and McIntosh, M.S. "Effect of nitrogen fertilization and *Pisolithus tinctorius* on *Quercus rubra* seedling root and top development." *Forest Science* 30 (1984): 124-128.
- Beguiristain, T. and Lapeyrie, F. "Host plant stimulates hypaphorine accumulation in *Pisolithus tinctorius* hyphae during ectomycorrhizal infection while excreted fungal hypaphorine controls root hair development." *New Phytologist* 136, no. 3 (1997): 525-532.
- Beguiristain, T., Cote, R., Rubini, P., Jayallemmand, C., and Lapeyrie, F. "Hypaphorine accumulation in hyphae of the ectomycorrhizal fungus, *Pisolithus tinctorius*." *Phytochemistry* 40, no. 4 (1995): 1089-1091.
- Berjaud, C. and D'Auzac, J. "Isolement et caracterisation des phosphatases d'un champignon ectomycorrhizogène typique: *Pisolithus tinctorius*. Effets de la carence en phosphate." *Physiologie Vegetale* 24 (1986): 163-172.
- Berman, J.T. and Bledsoe, C.S. "Soil transfers from valley oak (*Quercus lobata* Nee) stands increase ectomycorrhizal diversity and alter root and shoot growth on valley oak seedlings." *Mycorrhiza* 7, no. 5 (1998): 223-235.
- Berry, C.R. "Survival and growth of pine hybrid seedlings with *Pisolithus*." *Journal of Environmental Quality* 11 (1982): 709.
- Bettiol, W. and Krugner, T.L. "Influence of organic matter on the growth of ectomycorrhizal fungi *Pisolithus tinctorius* and *Thelephora terrestris*." *Pesquisa Agropecuaria Brasileira* 21 (1986): 829-835.
- Burgess, T., Dell, B., and Malajczuk, N. "Variation in mycorrhizal development and growth stimulation by 20 *Pisolithus* isolates inoculated on to *Eucalyptus grandis* W Hill ex Maiden." *New Phytologist* 127, no. 4 (1994): 731-739.
- Burgess, T., Laurent, P., Dell, B., Malajczuk, N., and Martin, F. "Effect of fungal-isolate aggressivity on the biosynthesis of symbiosis-related polypeptides in differentiating eucalypt ectomycorrhizas." *Planta* 195, no. 3 (1995): 408-417.
- Boiffin, V., Hodges, M., Galvez, S., Balestrini, R., Bonfante, P., Gadal, P., and Martin, F. "Eucalypt NADP-dependent isocitrate dehydrogenase - cDNA cloning and expression in ectomycorrhizae." *Plant Physiology* 117, no. 3 (1998): 939-948.
- Bonfante, P., Balestrini, R., Martino, E., Perotto, S., Plassard, C., and Mousain, D. "Morphological analysis of early contacts between pine roots and two ectomycorrhizal *Suillus* strains." *Mycorrhiza* 8, no. 1 (1998): 1-10.
- Bougher, N.L. and Malajczuk, N. "Effects of high soil moisture on formation of ectomycorrhizas and growth of karri (*eucalyptus diversicolor*) seedlings inoculated with *descolea maculata*, *pisolithus tinctorius* and *laccaria laccata*." *New Phytologist* 114 (1990): 87-91.
- Bucking, H., Beckmann, S., Heyser, W., and Kottke, I. "Elemental contents in vacuolar granules of ectomycorrhizal fungi measured by EELS and EDXS. A comparison of different methods and preparation techniques." *Micron* 29, no. 1 (1998): 53-61.

- Burgess, T., Malajczuk, N., and Dell, B. "Variation in *Pisolithus* based on basidiome and basidiospore morphology, culture characteristics and analysis of polypeptides using 1D SDS-PAGE." *Mycological Research* 99, no. Part 1 (1995): 1-13.
- Burke, R.M. and Cairney, J.G. "Carbohydrate oxidases in ericoid and ectomycorrhizal fungi: a possible source of Fenton radicals during the degradation of lignocellulose." *New Phytologist* 139, no. 4 (1998): 637-645.
- Cairney, J.W.G., Ashford, A.E., and Allaway, W.G. "Distribution of photosynthetically fixed carbon within root systems of *Eucalyptus pilularis* plants ectomycorrhizal with *Pisolithus tinctorius*." *New Phytologist* 112 (1989): 495-500.
- Cairney, J.W.G. and Chambers, S.M. "Interactions between *Pisolithus tinctorius* and its hosts: a review of current knowledge." *Mycorrhiza* 7, no. 3 (1997): 117-131.
- Cairney, J.W.G. and Smith, S.E. "Efflux of Phosphate from the Ectomycorrhizal Basidiomycete *Pisolithus tinctorius* - General Characteristics and the Influence of Intracellular Phosphorus Concentration." *Mycological Research* 97 (1993): 1261-1266.
- Cairney, J.W.G. and Smith, S.E. "The Influence of Monovalent Cations on Efflux of Phosphate from the Ectomycorrhizal Basidiomycete *Pisolithus tinctorius*." *Mycological Research* 97 (1993): 1267-1271.
- Cairney, J.W.G. and Smith, S.E. "Influence of Intracellular Phosphorus Concentration on Phosphate Absorption by the Ectomycorrhizal Basidiomycete *Pisolithus tinctorius*." *Mycological Research* 96 (1992): 673-676.
- Cambraia, J., Henriques, A.B., Muchove, R.M.C., and Pacheco, S. "Ammonium uptake by *Pinus caribaea* colonized with *Pisolithus tinctorius*." *R.Bras.Fistol.Veg.* 4 (1992): 87-90.
- Cao, W.G. and Crawford, D.L. "Purification and Some Properties of beta-Glucosidase from the Ectomycorrhizal Fungus *Pisolithus tinctorius* Strain SMF." *Canadian Journal of Microbiology* 39 (1993): 125-129.
- Cao, W.G. and Crawford, D.L. "Carbon Nutrition and Hydrolytic and Cellulolytic Activities in the Ectomycorrhizal Fungus *Pisolithus tinctorius*." *Canadian Journal of Microbiology* 39 (1993): 529-535.
- Cline, M.L., France, R.C., and Reid, C.P.P. "Intraspecific and interspecific growth variation of ectomycorrhizal fungi at different temperatures." *Canadian Journal of Botany* 65 (1987): 869-875.
- Crowley, D.E., Maronek, D.M., and Hendrix, J.W. "Effect of slow release fertilizers on formation of mycorrhizae and growth of container grown pine seedlings." *J.Environ.Hortic.* 4 (1986): 97-101.
- Cumming, J.R. "Growth and nutrition of nonmycorrhizal and mycorrhizal pitch pine (*Pinus rigida*) seedlings under phosphorus limitation." *Tree Physiology* 13 (1993): 173-187.
- Danielson, R.M., Griffiths, C.L., and Parkinson, D. "Effect of fertilization on the growth and mycorrhizal development of container-grown Jack pine seedlings." *Forest Science* 30 (1984): 828-835.
- Dell, B., Malajczuk, N., Bougher, N.L., and Thomson, G. "Development and function of *Pisolithus* and *Scleroderma* ectomycorrhizas formed in vivo with *Allocasuarina*, *Casuarina* and *Eucalyptus*." *Mycorrhiza* 5, no. 2 (1994): 129-138.
- Dennis, J.J. "Sclerotia of the Gasteromycete *Pisolithus tinctorius*." *Canadian Journal Microbiology* 26 (1980): 1505-1507.

- Dexheimer, J., Gerard, J., and Genet, P. "Study of mycorrhization of tap roots of *Eucalyptus globulus* seedlings grown in a clinostat." *Acta Botanica Gallica* 141, no. 4 (1995): 511-516.
- Diaz, E.C., Tagu, D., and Martin, F. "Ribosomal DNA internal transcribed spacers to estimate the proportion of *Pisolithus tinctorius* and *Eucalyptus globulus* RNAs in ectomycorrhiza." *Applied and Environmental Microbiology* 63, no. 3 (1997): 840-843.
- Dixon, R.K., Garrett, H.E., and Stelzer, H.E. "Growth and ectomycorrhizal development of loblolly pine progenies inoculated with three isolates of *Pisolithus tinctorius*." *Silvae Genetica* 36 (1987): 240-245.
- Dixon, R.K. and Hiolhiol, F. "Mineral nutrition of *Pinus caribaea* and *Eucalyptus camaldulensis* seedlings inoculated with *Pisolithus tinctorius* and *Thelephora terrestris*." *Communications in Soil Science and Plant Analysis* 23 (1992): 1387-1396.
- Dixon, R.K. and et al. "Container-grown and nursery-grown black oak seedlings inoculated with *Pisolithus tinctorius*. 1. Growth and ectomycorrhizal development in seedling production. 2. Growth and ectomycorrhizal development following outplanting on an Ozark clear cut." *Canadian Journal of Forest Research* 11 (1981): 487-496.
- Doumas, P., Berjaud, C., Calleja, M., Coupe, M., Espiau, C., and D'Auzac, J. "Phosphatases extracellulaires et nutrition phosphatée chez les champignons ectomycorhiziens et les plantes hôtes." *Physiologie Vegetale* 24 (1986): 173-184.
- Egerton-Warburton, L.M. and Griffin, B.J. "Differential responses of *Pisolithus tinctorius* isolates to aluminum in vitro." *Canadian Journal of Botany* 73, no. 8 (1995): 1229-1233.
- Greene, D.W., Manning, W.J., and Cooley, D.R. "Effect of ectomycorrhizal fungus *Pisolithus tinctorius* and auxin rooting formulations on growth of cortland apple trees." *Horticultural Science* 17 (1982): 655-656.
- Grenville, D.J., Peterson, R.L., and Piche, Y. "The development, structure, and histochemistry of sclerotia of ectomycorrhizal fungi I. *Pisolithus tinctorius* II. *Paxillus involutus*." *Canadian Journal of Botany* 63 (1985): 1402-1411.
- Henriques, A.B., Cambraia, J., Pacheco, S., and Muchove, R.M.C. "Nitrogen Partitioning in *pinus caribaea* var *hondurensis* colonized with *pisolithus tinctorius* I." *R.Bras.Fistol.Veg* 4 (1992): 91-94.
- Hilbert, J.L. and Martin, F. "Regulation of gene expression in ectomycorrhizas. I. Protein changes and the presence of ectomycorrhiza-specific polypeptides in the *Pisolithus-Eucalyptus* symbiosis." *New Phytologist* 110 (1988): 339-346.
- Hilger, A.B., Thomas, K.I., and Krause, H.H. "The effect of several buffers on growth and phosphorus nutrition of selected ectomycorrhizal fungi." *Soil Biology and Biochemistry* 18 (1986): 61-67.
- Hiol, F.H., Dixon, R.K., and Curl, E.A. "The feeding preference of mycophagous *Collembola* varies with the ectomycorrhizal symbiont." *Mycorrhiza* 5, no. 2 (1994): 99-103.
- Hung, L.L. and Chien, C.Y. "Physiological studies on two ectomycorrhizal fungi, *Pisolithus tinctorius* and *Suillus bovinus*." *Trans.Mycol.Soc.Japan* 19 (1978): 121-128.
- Hung, L.L. and Molina, R. "Temperature and time in storage influence the efficacy of selected isolates of fungi in commercially produced ectomycorrhizal inoculum." *Forest Science* 32 (1986): 534-545.
- Ineichen, K., Wiemken, V., and Wiemken, A. "Shoots, roots and ectomycorrhiza formation of pine seedlings at elevated atmospheric carbon dioxide." *Plant Cell and Environment* 18, no. 6 (1995): 703-707.

Ineichen, K. and Weimken, V. "Changes in the fungus specific soluble carbohydrate pool during rapid and synchronous ectomycorrhiza formation of picea abies with pisolithus tinctorius." *Mycorrhiza* 2 (1992): 1-7.

Junghans, D.T., Gomes, E.A., Guimaraes, W.V., Barros, E.G., and Araujo, E.F. "Genetic diversity of the ectomycorrhizal fungus *Pisolithus tinctorius* based on RAPD-PCR analysis." *Mycorrhiza* 7, no. 5 (1998): 243-248.

Kasuya, M.C.M., Muchovej, R.M.C., and et al. "In vitro ectomycorrhizal formation in six varieties of pine." *Forest Ecology and Management* 47 (1992): 127-134.

Kope, H.H. "Interactions of Heterokaryotic and Homokaryotic Mycelium of Sibling Isolates of the Ectomycorrhizal Fungus *Pisolithus arhizus*." *Mycologia* 84 (1992): 659-667.

Kope, H.H. and Fortin, J.A. "Antifungal activity in culture filtrates of the ectomycorrhizal fungus *Pisolithus tinctorius*." *Canadian Journal of Botany* 68 (1990): 1254-1259.

Kope, H.H. and Fortin, J.A. "Germination and comparative morphology of basidiospores of *Pisolithus arhizus*." *Mycologia* 82 (1990): 350-357.

Lamhamedi, M.S., Fortin, J.A., Kope, H.H., and Kropp, B.R. "Genetic variation in ectomycorrhiza formation by *Pisolithus arhizus* on *Pinus pinaster* and *Pinus banksiana*." *New Phytologist* 115 (1990): 689-697.

Lapeyrie, F., Albrecht, C., and Bredard, S. "Specific induction of root chitinases by ectomycorrhizal or pathogenic fungal strains." *Acta Botanica Gallica* 141, no. 4 (1995): 437-441.

Lei, J., Lapeyrie, F., Malajczuk, N., and Dexheimer, J. "Infectivity of pine and eucalypt isolates of *Pisolithus tinctorius* (Pers.) Coker & Couch on roots of *Eucalyptus urophylla* S. T. Blake in vitro." *New Phytologist* 116 (1990): 115-122.

Lewis, J.D., Thomas, R.B., and Strain, B.R. "Effect of elevated CO₂ on mycorrhizal colonization of loblolly pine (*Pinus taeda* L) seedlings." *Plant and Soil* 165, no. 1 (1994): 81-88.

Leyval, C., Turnau, K., and Haselwandter, K. "Effect of heavy metal pollution on mycorrhizal colonization and function: physiological, ecological and applied aspects." *Mycorrhiza* 7, no. 3 (1997): 139-153.

Lobo, A.M., Abreu, P.M.d., Prabhakar, S., Godinho, L.S., Jones, R., Rzepa, H.S., and Williams, D.J. "Triterpenoids of the fungus *Pisolithus tinctorius*." *Phytochemistry* 27 (1988): 3569-3574.

McAfee, B.J. and Fortin, J.A. "Competitive interactions of ectomycorrhizal mycobionts under field conditions." *Canadian Journal of Botany* 64 (1986): 848-852.

Malajczuk, N., Lapeyrie, F.F., and Garbaye, J. "Infectivity of pine and eucalypt isolates of *Pisolithus tinctorius* on roots of *Eucalyptus urophylla* in vitro. 1. Mycorrhiza formation in model systems." *New Phytologist* 114 (1990): 627-631.

Maronek, D.M., Hendrix, J.W., and Cornelius, P.L. "Slow-release fertilizers optimize mycorrhizal development in container-grown seedlings inoculated with *Pisolithus tinctorius*." *Journal of American Society for Horticulture Science* 107 (1982):1104-1109.

Maronek, D.M. and Hendrix, J.W. "Growth acceleration of pin oak seedlings with a mycorrhizal fungus." *Horticultural Science* 14 (1979): 627.

Martins, A., Casimiro, A., and Pais, M.S. "Influence of mycorrhization on physiological parameters of micropropagated *Castanea sativa* Mill. plants." *Mycorrhiza* 7, no. 3 (1997): 161-165.

- Martin, F., Delaruelle, C., and Ivory, M. "Genetic variability in intergenic spacers of ribosomal DNA in *Pisolithus* isolates associated with pine, eucalyptus and *Azelia* in lowland Kenyan forests." *New Phytologist* 139, no. 2 (1998): 341-352.
- Massicotte, H.B., Peterson, R.L., Ackerley, C.A., and Melville, L.H. "Structure and ontogeny of *Betula alleghaniensis*-*Pisolithus tinctorius* ectomycorrhizae." *Canadian Journal of Botany* 68 (1990): 579-593.
- Mousain, D. and Salsac, L. "Utilisation du phytate et activites phosphatases acides chez *Pisolithus tinctorius*, basidiomycete mycorrhizien." *Physiologie Vegetale* 24 (1986):193-200.
- Nylund, J.-E., Kasimir, A., and Arveby, A.S. "Cell wall penetration and papilla formation in senescent cortical cells during ectomycorrhizae synthesis in vitro." *Physiological Plant Pathology* 21 (1982): 71-74.
- Oh, K.I., Melville, L.H., and Peterson, R.L. "Comparative structural study of *Quercus serrata* and *Q. acutissima* formed by *Pisolithus tinctorius* and *Hebeloma cylindrosporum*." *Trees - Structure and Function* 9, no. 3 (1995): 171-179.
- Omran, T.A. and Hassan, F.A. "The effect of ectomycorrhizae (*Pisolithus tinctorius*) on the growth and phosphorus availability of *Taxodium distichum* seedlings." *Egyptian Journal of Applied Sci.* 5 (1990): 268-273.
- Orlovich, D.A. and Ashford, A.E. "Structure and Development of the Dolipore Septum in *Pisolithus Tinctorius*." *Protoplasma* 178 (1994): 66-80.
- Orlovich, D.A. and Ashford, A.E. "Polyphosphate Granules Are an Artefact of Specimen Preparation in the Ectomycorrhizal Fungus *Pisolithus tinctorius*." *Protoplasma* 173 (1993): 91-102.
- Orlovich, D.A., Ashford, A.E., and Cox, G.C. "A reassessment of polyphosphate granule composition in the ectomycorrhizal fungus *Pisolithus tinctorius*." *Australian Journal of Plant Physiology* 16 (1989): 107-115.
- Paris, F., Bonnaud, P., Ranger, J., and Lapeyrie, F. "In vitro weathering of phlogopite by ectomycorrhizal fungi .1. Effect of K⁺ and Mg²⁺ deficiency on phyllosilicate evolution." *Plant and Soil* 177, no. 2 (1995): 191-201.
- Pawuk, W.H. and Barnett, J.P. "Benomyl stimulates ectomycorrhizal development by *Pisolithus tinctorius* on shortleaf pine grown in containers." *USDA For.Ser. SO-267* (1981): 1-3.
- Pedras, M.S.C., McAfee, B.J., and Lapp, M.S. "Biotransformation of 1-naphthalene acetic acid by the ectomycorrhizal fungus *Pisolithus arhizus*." *Phytochemistry* 36 (1994): 825-827.
- Peeler, T.C. and Mullins, J.T. "Nitrogen nutrition in the ectomycorrhizal fungus *Pisolithus tinctorius*." *Mycologia* 74 (1982): 334-336.
- Piche, Y., Peterson, R.L., Howarth, M.J., and Fortin, J.A. "A structural study of the interaction between the ectomycorrhizal fungus *Pisolithus tinctorius* and *pinus strobus* roots." *Canadian Journal of Botany* 61 (1983): 1185-1193.
- Piche, Y. and et al. "Cytoplasmic phenols and polysaccharides in ectomycorrhizal and nonmycorrhizal short roots of pine." *New Phytologist* 88 (1981): 695-703.
- Pons, S., Munge, K.W., and Negm, F.B. "Effect of mannitol on the in vitro growth, temperature optimum and subsequent ectomycorrhizal infectivity of *Pisolithus tinctorius*." *Canadian Journal of Botany* 64 (1986): 1812-1816.

- Pope, P.E. "Pisolithus tinctorius increases the size of nursery grown red oak seedlings." *New Forest* 2 (1988): 5-16.
- Querejeta, J.I., Roldan, A., Albaladejo, J., and Castillo, V. "The role of mycorrhizae, site preparation, and organic amendment in the afforestation of a semi-arid Mediterranean site with *Pinus halepensis*." *Forest Science* 44, no. 2 (1998): 203-211.
- Quoreshi, A.M. and Timmer, V.R. "Exponential fertilization increases nutrient uptake and ectomycorrhizal development of black spruce seedlings." *Canadian Journal of Forest Research* 28, no. 5 (1998): 674-682.
- Ramstedt, M. and Soderhall, K. "Protease, phenoloxidase and pectinase activities in mycorrhizal fungi." *Transactions of the British Mycological Society* 81 (1983): 157-161.
- Regvar, M. and Gogala, N. "Changes in root growth patterns of (*Picea abies*) spruce roots by inoculation with an ectomycorrhizal fungus *Pisolithus tinctorius* and jasmonic acid treatment." *Trees*, no. 10 (1996): 410-414.
- Rose, S.L., Perry, D.A., Pilz, D., and Schoeneberger, M.M. "Allelopathic effects of litter on the growth and colonization of mycorrhizal fungi." *Journal of Chemical Ecology* 9 (1983): 1153-1162.
- Rousseau, J.V.D., Reid, C.P.P., and English, R.J. "Relationship between biomass of the mycorrhizal fungus *Pisolithus tinctorius* and phosphorus uptake in loblolly pine seedlings." *Soil Biology and Biochemistry* 24 (1992): 183-184.
- Ruehle, J.L. "Inoculation of containerized loblolly pine seedlings with basidiospores of *pisolithus tinctorius*." *USDA For.Ser.* 291 (1980): 1-4.
- Schier, G.A. and McQuattie, C.J. "Effects of carbon dioxide enrichment on response of mycorrhizal pitch pine (*Pinus rigida*) to aluminum: growth and mineral nutrition." *Trees* 12, no. 6 (1998): 340-346.
- Sharples, J.M. and Cairney, J.W.G. "Assimilation of inorganic nitrogen by a mycobiont isolated from *Pisonia grandis* R. Br. (Nyctaginaceae) mycorrhiza." *Mycorrhiza* 7, no. 5 (1998): 255-260.
- Smith, R.A. "Nutritional study of *Pisolithus tinctorius*." *Mycologia* 74 (1982): 54-58.
- Sohn, R.F. "*Pisolithus tinctorius* forms long ectomycorrhizae and alters root development in seedlings of *Pinus resinosa*." *Canadian Journal of Botany* 59 (1981): 2129-2134.
- Sword, M.A. and Garrett, H.E. "Boric Acid Phenolic Relationships Within the *Pinus echinata* *Pisolithus tinctorius* Ectomycorrhizal Association." *Tree Physiology* 14, no. 10 (1994): 1121-1130.
- Taber, W.A. and Taber, R.A. "Nutrition and respiration of basidiospores and mycelium of *Pisolithus tinctorius*." *Phytopathology* 72 (1982): 316-322.
- Taber, W.A. and Taber, R.A. "Reassessment of fungal dry weight as a measure of carbon source utilization by *Pisolithus tinctorius*." *Mycologia* 80 (1988): 855-858.
- Taber, W.A. and Taber, R.A. "Carbon nutrition and respiration of *Pisolithus tinctorius*." *Transactions of the British Mycological Society* 89 (1987): 13-26.
- Tagu, D., Kottke, I., and Martin, F. "Hydrophobins in ectomycorrhizal symbiosis: Hypothesis." *Symbiosis* 25, no. 1-3 (1998): 5-18.
- Tagu, D. and Martin, F. "Expressed sequence tags of randomly selected cDNA clones from *Eucalyptus globulus*-*pisolithus tinctorius* ectomycorrhiza." *Molecular Plant-Microbe Interactions* 8, no. 5 (1995): 781-783.

- Tam, P.C.F. "Heavy metal tolerance by ectomycorrhizal fungi and metal amelioration by *Pisolithus tinctorius*." *Mycorrhiza* 5, no. 3 (1995): 181-187.
- Tam, P.C.F. "Mycorrhizal Associations in *Pinus massoniana* Lamb and *Pinus elliottii* Engel Inoculated with *Pisolithus tinctorius*." *Mycorrhiza* 4 (1994): 255-263.
- Tam, C.F. and Griffiths, D.A. "Mycorrhizal associations in Hong Kong Fagaceae III. The ontogeny of mycorrhizal development, growth and nutrient uptake by *Quercus myrsinaefolia* seedlings inoculated with *Pisolithus tinctorius*." *Mycorrhiza* 2 (1993): 125-131.
- Tam, P.C.F. and Griffiths, D.A. "Mycorrhizal associations in Hong Kong Fagaceae III. The mobilization of organic and poorly soluble phosphates by the ectomycorrhizal fungus *Pisolithus tinctorius*." *Mycorrhiza* 2 (1993): 133-139.
- Tan, K.H. and Nopamornbodi, V. "Fulvic acid and the growth of the ectomycorrhizal fungus, *Pisolithus tinctorius*." *Soil Biology and Biochemistry* 11 (1979): 651-654.
- Thomson, J., Melville, L.H., and Peterson, R.L. "Interaction between the ectomycorrhizal fungi *Pisolithus tinctorius* and root hairs of *Picea mariana* (Pinaceae)." *American Journal of Botany* 76 (1989): 632-636.
- Tonkin, C.M., Malajczuk, N., and McComb, J.A. "Ectomycorrhizal formation by micropropagated clones of *Eucalyptus marginata* inoculated with isolates of *Pisolithus tinctorius*." *New Phytologist* 111 (1989): 209-214.
- Torres, P. and Honrubia, M. "Inoculation of containerized *Pinus halepensis* (Miller) seedlings with basidiospores of *Pisolithus arhizus* (Pers) Rauschert, *Rhizopogon roseolus* (Corda) Th M Fr and *Suillus collinitus* (Fr) O Kuntze." *Annales des Sciences Forestieres* 51, no. 5 (1994): 521-528.
- Treat, W.J. and Taber, W.A. "Production of beta-glucosidase (cellobiase) by *Pisolithus tinctorius*." *Biotechnology Letters* 10 (1988): 517-520.
- Turnau, K., Kottke, I., Dexheimer, J., and Botton, B. "Element distribution in mycelium of *Pisolithus arhizus* treated with cadmium dust." *Annals of Botany* 74 (1994): 137-142.
- Tibbett, M., Sanders, F.E., and Cairney, J.W.G. "The effect of temperature and inorganic phosphorus supply on growth and acid phosphatase production in arctic and temperate strains of ectomycorrhizal *Hebeloma* spp. in axenic culture." *Mycological Research* 102, no. Part:2 (1998): 2-135.
- Timonen, S. and Sen, R. "Heterogeneity of fungal and plant enzyme expression in intact Scots pine-*Suillus bovinus* and -*Paxillus involutus* mycorrhizospheres developed in natural forest humus." *New Phytologist* 138, no. 2 (1998): 355-366.
- Walker, R.F. "Formation of *Pisolithus tinctorius* ectomycorrhizae on California white fir in an eastern Sierra Nevada minesoil." *Great Basin Naturalist* 50 (1990): 85-87.
- Walker, R.F. "Ectomycorrhizal formation by *Pisolithus tinctorius* on *Quercus gambelii* X *Quercus turbinella* hybrid in an acidic Sierra Nevada mine soil." *Great Basin Nat.* 50 (1990): 367-370.
- Walker, R.F., Geisinger, D.R., Johnson, D.W., and Ball, J.T. "Enriched atmospheric CO₂ and soil P effects on growth and ectomycorrhizal colonization of juvenile ponderosa pine." *Forest Ecology and Management* 78, no. 1-3 (1995): 207-215.
- Walker, R.F. "*Pisolithus tinctorius*, a gasteromycete associated with Jeffrey and Sierra lodgepole pine on acid mine spoils in the Sierra Nevada." *Great Basin Naturalist* 49 (1989): 111-112.

Warrington, S.J., Black, H.D., and Coors, L.B. "Entry of *Pisolithus tinctorius* hyphae in *Pinus taeda*." *Canadian Journal of Botany* 59 (1981): 2135-2139.

Watling, R., Taylor, A., See, L.S., Sims, K., and Alexander, I. "A rainforest *Pisolithus*; its taxonomy and ecology." *Nova Hedwigia* 61, no. 3-4 (1995): 417-429.

Westhuizen, G.C.A.v.d. and Eicker, A. "The morphology and cultural characters of *Pisolithus tinctorius* (Gasteromycetes) in South Africa." *South African Journal of Botany* 55 (1989): 17-21.

Yazid, S.M., Lee, S.S., and Lapeyrie, F. "Growth Stimulation of *Hopea* spp (Dipterocarpaceae) Seedlings Following Ectomycorrhizal Inoculation with an Exotic Strain of *Pisolithus tinctorius*." *Forest Ecology and Management* 67, no. 1-3 (1994): 339-343.

Zhou, M.Y. and Sharik, T.L. "Ectomycorrhizal associations of northern red oak (*Quercus rubra*) seedlings along an environmental gradient." *Canadian Journal of Forest Research* 27, no. 11 (1997): 1705-1713.