

PUBLICATIONS UP TO 2000

Research papers

- 1) Nielsen E.*, **Forlani G.**, Cella R. and Parisi B. (1986) Biochemical characterization of the natural resistance of rice to the proline analogue azetidin-2-carboxylic acid. *Plant Sci.* *44*, 147-154.
- 2) **Forlani G.***, Riccardi G., De Rossi E. and De Felice M. (1991) Biochemical evidence for multiple forms of acetohydroxy acid synthase in *Spirulina platensis*. *Arch. Microbiol.* *155*, 298-302.
- 3) Riccardi G.*, De Rossi E., Milano A., **Forlani G.** and De Felice M. (1991) Molecular cloning and expression of *Spirulina platensis* acetohydroxy acid synthase genes in *Escherichia coli*. *Arch. Microbiol.* *155*, 360-365.
- 4) **Forlani G.**, Nielsen E.*, Landi P. and Tuberosa R. (1991) Chlorsulfuron tolerance and acetolactate synthase activity in corn (*Zea mays* L.) inbred lines. *Weed Sci.* *39*, 553-557.
- 5) Sanangelantoni A.M., **Forlani G.**, Ambroselli F., Cammarano P. and Tiboni O.* (1992) The *GlnA* gene of the extremely thermophilic eubacterium *Thermotoga maritima*: cloning, primary structure, and expression in *Escherichia coli*. *J. Gen. Microbiol.* *138*, 383-393.
- 6) **Forlani G.***, Nielsen E. and Racchi M.L. (1992) A glyphosate-resistant 5-enol-pyruvyl-shikimate-3-phosphate synthase confers tolerance to a maize cell line. *Plant Sci.* *85*, 9-15.
- 7) Sellin C.*, **Forlani G.**, Dubois J., Nielsen E. and Vasseur J. (1992) Glyphosate tolerance in *Cichorium intybus* L. var. Magdebourg. *Plant Sci.* *85*, 223-231.
- 8) Campanile C., **Forlani G.**, Basso A.L., Ricca E., Sacco M., Ferrara L. and De Felice M.* (1993) Identification and characterization of the *proBA* operon of *Streptococcus bovis*. *Appl. Environ. Microbiol.* *59*, 519-522.
- 9) **Forlani G.***, Suardi M.C., Parisi B. and Nielsen E. (1994) Regulatory effects of exogenous branched-chain amino acids in *Nicotiana plumbaginifolia* cell suspension cultures. *Plant Growth Regul.* *14*, 203-209.
- 10) **Forlani G.***, Parisi B. and Nielsen E. (1994) 5-Enol-pyruvyl-shikimate-3-phosphate synthase from *Zea mays* cultured cells: purification and properties. *Plant Physiol.* *105*, 1107-1114.
- 11) **Forlani G.*** and Racchi M.L. (1995) Glyphosate tolerance in maize (*Zea mays* L.) 1. Differential response among inbred lines. *Euphytica* *82*, 157-164.
- 12) Racchi M.L., Rebecchi M., Todesco G., Nielsen E. and **Forlani G.*** (1995) Glyphosate tolerance in maize (*Zea mays* L.) 2. Selection and characterization of a tolerant somaclone. *Euphytica* *82*, 165-173.
- 13) **Forlani G.***, Mantelli M., Branzoni M., Nielsen E. and Favilli F. (1995) Differential sensitivity of plant-associated bacteria to sulfonylurea and imidazolinone herbicides. *Plant Soil* *176*, 243-253.
- 14) **Forlani G.***, Pastorelli R., Branzoni M. and Favilli F. (1995) Root colonization efficiency, plant-growth-promoting activity and potentially related properties in plant-associated bacteria. *J. Genet. Breed.* *49*, 343-352.
- 15) **Forlani G.***, Suardi M.C. and Nielsen E. (1996) Deregulated branched-chain amino acid synthesis in a *Nicotiana plumbaginifolia* cell line resistant to valine. *Plant Growth Regul.* *19*, 241-248.

- 16) Lejczak B.*, Boduszek B., Kafarski P., **Forlani G.**, Wojtasek H. and Wieczorek P. (1996) Mode of action of herbicidal derivatives of aminomethylenebisphosphonic acid. I. Physiological activity and inhibition of anthocyanins biosynthesis. *J. Plant Growth Regul.* *15*, 109-113.
- 17) **Forlani G.***, Lejczak B. and Kafarski P. (1996) *N*-pyridyl-aminomethylene-bisphosphonic acids inhibit the first enzyme in the shikimate pathway, 3-deoxy-*D*-arabino-heptulosonate-7-phosphate synthase. *Pestic. Biochem. Physiol.* *55*, 180-188.
- 18) Limauro D.*, Falciatore A., Basso A.L., **Forlani G.** and De Felice M. (1996) Proline biosynthesis in *Streptococcus thermophilus*: characterization of the *proBA* operon and its products. *Microbiology* *142*, 3275-3282.
- 19) **Forlani G.*** (1997) Properties of the 5-enol-pyruvyl-shikimate-3-phosphate synthase isoforms isolated from maize cultured cells. *J. Plant Physiol.* *150*, 369-375.
- 20) **Forlani G.***, Scainelli D. and Nielsen E. (1997) Δ^1 -pyrroline-5-carboxylate dehydrogenase from cultured cells of potato. Purification and properties. *Plant Physiol.* *113*, 1413-1418.
- 21) **Forlani G.***, Scainelli D. and Nielsen E. (1997) Two δ^1 -pyrroline-5-carboxylate dehydrogenase isoforms are expressed in *Nicotiana plumbaginifolia* cultured cells and are differentially modulated during the culture growth cycle. *Planta* *202*, 242-248.
- 22) Dewaele E., **Forlani G.**, Degrande D., Nielsen E. and Rambour S.* (1997) Biochemical characterization of chlorsulfuron resistance in *Cichorium intybus* L. var. Witloof. *J. Plant Physiol.* *151*, 109-114.
- 23) **Forlani G.**, Kafarski P., Lejczak B.* and Wieczorek P. (1997) Mode of action of herbicidal derivatives of aminomethylenebisphosphonic acid. II. Reversal of herbicidal action by aromatic amino acids. *J. Plant Growth Regul.* *16*, 147-152.
- 24) Kafarski P.*, Lejczak B., **Forlani G.**, Gancarz R., Torreilles C., Grembecka J., Ryczek A. and Wieczorek P. (1997) Herbicidal derivatives of aminomethylenebisphosphonic acid. III. Structure-activity relationship. *J. Plant Growth Regul.* *16*, 153-158.
- 25) Racchi M.L.*, **Forlani G.**, Stefanini F. and Camussi A. (1997) Inheritance of glyphosate tolerance among maize somaclones. *Maydica* *42*, 275-280.
- 26) **Forlani G.***, Mantelli M. and Nielsen E. (1999) Biochemical evidence for multiple acetoin-forming enzymes in cultured plant cells. *Phytochemistry* *50*, 255-262.
- 27) **Forlani G.*** (1999) Purification and properties of a pyruvate carboligase from *Zea mays* cultured cells. *Phytochemistry* *50*, 1305-1310.
- 28) **Forlani G.***, Mangiagalli A., Nielsen E. and Suardi M.C. (1999) Degradation of the phosphonate herbicide glyphosate in soil: evidence for a possible involvement of unculturable microorganisms. *Soil Biol. Biochem.* *31*, 991-997.
- 29) **Forlani G.***, Lejczak B. and Kafarski P. (1999) The herbicidally active compound *N*-2-(6-methyl-pyridyl)-aminomethylene-bisphosphonic acid inhibits *in vivo* aromatic biosynthesis. *J. Plant Growth Regul.* *18*, 73-79.
- 30) Massarelli I., **Forlani G.**, Ricca E. and De Felice M.* (2000) Enhanced and feedback resistant γ -glutamyl kinase activity of an *Escherichia coli* transformant carrying a mutated *proB* gene of *Streptococcus thermophilus*. *FEMS Microbiol. Lett.* *182*, 143-147.
- 31) **Forlani G.*** (2000) Purification and properties of a cytosolic glutamine synthetase expressed in *Nicotiana plumbaginifolia* cultured cells. *Plant Physiol. Biochem.* *38*, 201-207.

- 32) **Forlani G.***, Mangiagalli A., Pinter C. and Nielsen E. (2000) Expression of δ^1 -pyrroline-5-carboxylate dehydrogenase and proline/arginine homeostasis in *Solanum tuberosum*. *Physiol. Plant.* *110*, 22-27.
- 33) **Forlani G.***, Lejczak B. and Kafarski P. (2000) The herbicidally active compound *N*-2-(5-chloro-pyridyl)-aminomethylene-bisphosphonic acid acts by inhibiting both glutamine and aromatic amino acid biosynthesis. *Aust. J. Plant Physiol.* *27*, 677-683.
- 34) **Forlani G.**, Seves A.M. and Ciferri O.* (2000) A bacterial extracellular proteinase degrading silk fibroin. *Int. Biodeter. Biodegrad.* *46*, 271-275.

Reviews

- 35) Nielsen E.* and **Forlani G.** (1987) Salt tolerance mechanisms in plants and the use of cell culture techniques for selection and for physiological studies. *Agric. Medit.* *117*, 339-347.
- 36) Kafarski P.*, Lejczak B. and **Forlani G.** (2000) Herbicidally active aminomethylene-bisphosphonic acids. *Heteroatom Chem.* *11*, 449-453.
- 37) Kafarski P.*, Lejczak B. and **Forlani G.** (2001) Biodegradation of pesticides containing carbon-to-phosphorus bond. *ACS Sym. Ser. 777 (Pesticide Biotransformation in Plants and Micro-organisms, Hall J.C., Hoagland R.E. and Zablotowicz R.M., Eds)*, 145-163.