

# Molecular Plant Physiology and Biotechnology

## Publications

### 1991-2000

- Armstrong F, Benkert R, Bentrup F-W, Obermeyer G** (1999) Measuring ion channel activity during polar growth of pollen tubes. In: Sexual Plant Reproduction and Biotechnological Applications, Cresti M, Cai G, Moscatelli A (eds), Springer Verlag, 271-281
- El-Ghazaly G, Moate R, Cresti M, Walles B, Takahashi Y, Ferreira F, Obermeyer G** (1999) Localization and release of allergens from tapetum and pollen grains of *Betula pendula*. Protoplasma **208**, 37-46
- Sukhorukov VL, Benkert R, Obermeyer G, Bentrup F-W, Zimmermann U** (1998) Electrorotation of isolated generative and vegetative cells, and of intact pollen grains of *Lilium longiflorum*. J.Membr.Biol. **160**, 21-32
- Obermeyer G, Klaushofer H, Nagl M, Höftberger M, Bentrup F-W** (1998) *In-vitro* germination and growth of lily pollen tubes is affected by protein phosphatase inhibitors. Planta, **207**, 303-312
- Benkert R, Obermeyer G, Bentrup F-W** (1997) The turgor pressure of growing lily pollen tubes. Protoplasma **198**, 1-8
- Zarsky V, Cvrckova F, Pavlova L, Obermeyer G, Tupy J, Vejlupkova Z** (1997) There and back again - GTPases and internal organization of plant cells. Acta Univ.Carolinae, Biol. **42**
- Fricker MD, White NS, Obermeyer G** (1997) pH gradients are not associated with tip growth in pollen tubes of *Lilium longiflorum*. J.Cell Sci. **110**, 1729-1740
- Engel E, Richter K, Obermeyer G, Briza P, Kungl AJ, Simon B, Auer M, Ebner C, Rheinberger H-J, Breitenbach M, Ferreira F** (1997) Immunological and biological properties of bet v 4, a novel birch pollen allergen with two EF-hand calcium-binding domains. J.Biol.Chem. **272**, 28630-28637
- Plätzer K, Obermeyer G, Bentrup F-W** (1997) AC fields of low frequency and amplitude stimulate pollen tube growth possible via stimulation of the plasma membrane H<sup>+</sup> ATPase. Bioelectrochem.Bioenerget. **44**, 95-102
- Obermeyer G\*, Kriechbaumer R, Strasser D, Maschessnig A, Bentrup F-W** (1996) Boric acid stimulates the plasma membrane H<sup>+</sup> ATPase of ungerminated lily pollen grains. Physiol.Plant. **98**, 281-290
- Obermeyer G\*, Sommer A, Bentrup F-W** (1996) Potassium and voltage dependence of the inorganic pyrophosphatase of intact vacuoles from *Chenopodium rubrum*. BBA **1284**, 203-212
- Obermeyer G\*, Blatt MR** (1995) Electrical properties of intact pollen grains of *Lilium longiflorum*: Characteristics of the non-germinating grain. J. Exp. Botany **46**, 803-813
- Feijó JA, Malhó R, Obermeyer G\*** (1995) Ion dynamics and its possible role during in vitro pollen germination and tube growth. Protoplasma **187**, 155-167
- Obermeyer G\*, Weisenseel MH** (1995) Introduction of impermeable molecules into pollen grains by electroporation. Protoplasma **187**, 132-137
- Obermeyer G, Armstrong F, Blatt MR\*** (1994) Selective block by  $\alpha$ -dendrotoxin of the K<sup>+</sup> inward rectifier at the *Vicia* guard cell plasma membrane. J.Membr.Biol. **137**, 249-259
- De Boer AH\*, Van Duijn B, Giesberg P, Wegner L, Obermeyer G, Köhler K, Linz K** (1994) Lasermicrosurgery: A versatile tool in plant (electro)-physiology. Protoplasma **178**, 1-10
- Fricker MD\*, Tlalka M, Ermanntraut J, Obermeyer G, Dewey M, Gurr S, Patrick J, White NS** (1994), Confocal fluorescence ratio imaging of ion activities in plant cells. Scanning Microscopy Supplement **8**, 391-405
- Obermeyer G\*, Kolb HA** (1993) K<sup>+</sup> channels in the plasma membrane of lily pollen protoplasts. Botanica Acta **106**, 26-31

**Obermeyer G\*, Lützel Schwab M, Heumann HG, Weisenseel MH** (1992) Immunolocalisation of H<sup>+</sup>-ATPases in the plasma membrane of pollen grains and pollen tubes of *Lilium longiflorum*. *Protoplasma* **171**, 55-63

**Obermeyer G, Weisenseel MH\*** (1991) Calcium channel blocker and calmodulin antagonists affect the gradient of free calcium ions in lily pollen tubes. *Eur.J.Cell Biol.* **56**, 319-327