### YONGMING ZHOU

### WORKING ADDRESS

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#### **EDUCATION**

1987 Ph.D. Department of Agronomy, Huazhong Agricultural University, Wuhan, China 1984 M.Sc. Department of Agronomy, Huazhong Agricultural University, Wuhan, China 1981 B.Sc. Department of Agronomy, Huazhong Agricultural University, Wuhan, China

### POSITIONS HELD

- 1995-present Professor, National Laboratory of Crop Genetic Improvement, Wuhan, China 2000-2004 Research Scientist, Department of Biology, University of Saskatchewan, Saskatoon, Canada
- 1998 Guest Researcher, Institute of Plant Molecular Biology, National Research Council, Saskatoon, Canada
- 1992-1994 Associate Professor in plant genetics and rapeseed breeding, Department of Agronomy, Huazhong Agricultural University, Wuhan, China
- 1993 Visiting Scholar, Department of Plant Science, University of Manitoba, Winnipeg, Canada
- 1988-1991 Assistant Professor in plant genetics and rapeseed breeding, Department of Agronomy, Huazhong Agricultural University, Wuhan, China

# MAJOR RESEARCH EXPERIENCE

- Rapeseed breeding for high yield, disease resistance, canola quality and high oil content
- Development of breeding methods for *B. napus* based on recurrent selection and microspore culture
- Genetic studies of major quality characteristics, including fatty acids, glucosinolates and oil content in Chinese rapeseed varieties
- Identification of suitable procedures for microspore culture of interspecific hybrids between *Brassica* species
- Genetic transformation of Chinese winter rapeseed
- Molecular and cellular studies of cell cycle genes from *Arabidopsis* and their potential application to *Brassica* species

# PROFESSIONAL EXPERIENCE

- 1997-2000 Member of the Advisory Group for New Oil Crop Cultivar Registration, the Examination Committee for Registration of Crop Cultivars of China
- 1996–2000 Member of the steering committee for the program "Collaboration in Rapeseed Sciences" between Huazhong Agricultural University and the University of Manitoba (funded by Canadian International Development Agency)
- 1994-1997 Member of the Executive Committee of Chinese Oil Crops Association
- 1992–1998 Associate Director of Rapeseed Genetics and Breeding Laboratory, Huazhong Agricultural University
- 1991-1995 Coordinator of a national collaborative breeding project for the improvement of seed quality in *Brassica napus* in China

#### **AWARDS**

- 1996 Honor of "Scientists and Experts with Outstanding Achievements in Professional Career", awarded by the State Council of China
- 1995 Honor of "Excellent Young Scientist", awarded by the Agriculture Ministry of China
- 1994 Award of First Class Prize of the Advancement of Science and Technology, awarded by the Education Ministry of China, for the research program of "Studies on genetics and breeding of major quality characteristics in Brassica napus"

# SELECTED PUBLICATIONS

- 1 Yuan M., **Zhou Y.\***, and Liu D. (2004) Genetic diversity among populations and breeding lines from recurrent selection in *Brassica napus* as revealed by RAPD markers. Plant Breed. 123, 9-12 (\*corresponding author)
- 2 Pan G., **Zhou Y.**, Fowke L. C. and Wang H. (2004) An efficient method for flow cytometric analysis of pollen and detection of 2n nuclei in *Brassica napus* pollen. Plant Cell Rep. 23: 196-202
- **Zhou Y.**, Li G., Brandizzi F., Fowke L. C. and Wang H. (2003) The plant cyclin-dependent kinase inhibitor ICK1 has distinct functional domains for *in vivo* kinase inhibition, protein instability and nuclear localization. Plant J. 35: 476-489
- 4 **Zhou Y.,** Wang H, Gilmer S, Whitwill S, Fowke LC. (2003) Effects of co-expressing the plant CDK inhibitor ICK1 and D-type cyclin genes on plant growth, cell size and ploidy in Arabidopsis thaliana. Planta 216: 604-613
- 5 **Zhou Y.,** Wang H., Gilmer S., Whitwill S., Keller W. and Fowke L.C. (2002) Control of plant and pollen development by the plant cyclin-dependent kinase inhibitor ICK1 in transgenic *Brassica* plants. Planta, 215:248-257
- **Zhou Y.**, Fowke L.C. and Wang H. (2002) Plant CDK inhibitors: studies of interactions with cell cycle regulators in the yeast two-hybrid system and functional comparisons in transgenic *Arabidopsis* plants. Plant Cell Rep, 20:967-975
- Wang H., **Zhou Y**., Gilmer S., Whitwill S. and Fowke L. C. (2000) expression of the plant cyclin-dependent kinase inhibitor ICK1 affects cell division, plant growth and morphology. Plant J., 24: 613-623
- 8 Liu Z., **Zhou Y\***., Shi S., and Wei Z. (2000) genetic analysis of in vitro microspore embryogenesis in *Brassica napus*. Acta Agronomica Sinica, 26: 104-109
- 9 Wu J., Shi S., **Zhou Y**. and Liu H. (1999) Selection of rapeseed cultivar Huashuang 3 and its study. J. Huazhong Agric. Univ., 18:1-4
- 10 Shi S. and **Zhou Y**. (1998) A study of the techniques of hypocotyl explant culture for high-frequency shoot regeneration of rapeseed (*Brassica napus*). Chinese J. Oil Crop Sc., 20(2):1-6
- 11 Shi S., **Zhou Y**., Wang X. (1998) Agrobacterium-mediated transformation in *Brassica napus*. J. Huazhong Agric. Univ., 17:205-210
- 12 **Zhou Y.**, Tan Y., Liu M., Wen Z. and Shi S.(1998) Studies on radiation induced mutation in *Brassica napus*. Chinese J. Oil Crop Sc., 20(4):1-5
- 13 **Zhou Y.**, Lin Z., Dong J., Wen Z. Shi S., and Zhang L. (1998) Recurrent selection in *Brassica napus* 4. Evaluation of the selection for resistance to *Sclerotinia sclerotiorum*. J. Huazhong Agric. Univ., 17:312-316
- 14 **Zhou Y.** and Scarth R. (1996) Plant regeneration from isolated microspore culture of hybrids between *Brassica napus* and *B. juncea*. Acta Agronomica Sinica, 22(4): 399-402
- 15 **Zhou Y.**, Wu J., Wen Z. and Liu H. (1996) Recurrent Selection in *Brassica napus* 3. Yield potential and disease resistance of S1 families and selected lines. J. Huazhong Agric. Univ., 15: 322-327

- 16 **Zhou Y.** and Scarth R. (1995) Microspore culture of hybrids between *Brassica napus* and *B. campestris*. Acta Botanica Sinica, 37: 848-855.
- 17 **Zhou Y.** and Wu J. (1995) Recurrent selection in *Brassica napus* 2. Synthesis of a basic population and preliminary evaluation of selection to the population. J. Huazhong Agric. Univ., 14:26-32
- 18 **Zhou Y.** and Bai H. (1994) Identification and genetic studies of the inhibition of dominant male sterility in *Brassica napus*. Plant Breed., 113:222-226
- 19 **Zhou Y.** (1993) Recurrent selection in *Brassica napus* 1. Transfer of dominant male sterile gene into genotypes with various types of cytoplasm. Acta Agronomica Sinica, 19:70-76
- 20 **Zhou Y.** and Liu H. (1991) Differences of seed oil content and agronomic traits among the genotypes of erucic acid content in *Brassica napus*. Chinese Oil Crops, 13(2):4-8
- 21 **Zhou Y.** and Liu H.(1989) Correlation between quality and agronomic characteristics in *Brassica napus*. J. Huazhong Agric. Univ., 8: 97-101
- 22 **Zhou Y.** and Liu H.(1989) Inheritance of the leaf shape in *Brassica napus*. Chinese Oil Crops, (4):15-17
- 23 **Zhou Y.** and Liu H. (1987) Inheritance of major fatty acids in *Brassica napus*. Acta Agronomica Sinica, 13:1-10
- 24 **Zhou Y.** and Liu H. (1987) Genetics of total glucosinolate content in *Brassica napus*. Chinese Oil Crops, (1):15-18

### **REFERENCES**

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