

## **Dr Aurelia Ślusarkiewicz-Jarzina**

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### **Field of specialisation:**

Biology, plant embryology, tissue culture

### **Research interests:**

Research on obtaining haploids and doubled haploids of cereals by using anther culture. Embryological examinations of development stages of androgenic structures and immature embryos during *in vitro* culture.

### **Co-operation:**

Plant Breeding: Hodowla Roślin DANKO - Choryń, Poznańska Hodowla Roślin, Małopolska Hodowla Roślin, Hodowla Roślin - Nasiona Kobierzyc.

### **Organization of events:**

Training and consultation regarding haploids and doubled haploid lines production of triticale, wheat and oat was conducted for the staff of Plant Breeding Stations and the instruction manuals (protocols) were prepared.

1. Training Workshop "Production of doubled haploid lines of cereals" - IPG PAS Poznań, 11-12 May 2001.
2. Training Conference "Haploids, doubled haploids, *in vitro* cultures of hybrid cereal proembryos and embryos" - IPG PAS, Poznań, 18 - 19 April 2001.
3. Workshop "Anther culture and embryo culture. PAGEN, Molecular and cytogenetic diagnostics in plant breeding". School of Biotechnology, 27-30 April 2004, Poznań, Poland.
4. Scientific Workshops "Haploids and doubled haploid lines in genetics and plant breeding" and "Distant Hybrids of Crops", 18-21 October 2005, Inowrocław.
5. Training Workshop "Production of haploids and doubled haploid lines of wheat using isolated microspore method" - IPG PAS, Poznań, June 3-4, 2006.
6. Training Workshop "Production of haploids and doubled haploids lines by anther culture of oat" - IPG PAS, Poznań, 27-28 May 2008.

## Publications:

1. Ponitka A., Ślusarkiewicz-Jarzina A. (2009). Regeneration of oat androgenic plants in relation to induction media and culture conditions of embryo-like structures. *Acta Soc. Bot. Pol.* 3: 209-213.
2. Ślusarkiewicz-Jarzina A., Ponitka A. (2007). The effect of physical medium forms on anther culture response of Polish cultivated oat (*Avena sativa* L.). *Acta Biologica Cracoviensia* 49: 27-31.
3. Ponitka A., Ślusarkiewicz-Jarzina A. (2007). The effect of liquid and solid medium on production of winter triticale (x *Triticosecale* Wittm.) anther-derived embryos and plants. *Cereal Res. Comm.* 35: 15-22.
4. Ponitka A., Ślusarkiewicz-Jarzina A. (2004). The cleared-ovule technique of early embryo development in *Secale cereale* x *Zea mays* crosses. *Acta Biologica Cracoviensia Series Botanica.* 46: 133-137.
5. Ślusarkiewicz-Jarzina A., Ponitka A. (2003). Efficient production of spontaneous and induced doubled haploid triticale plants derived from anther culture. *Cereal Res. Comm.* 3-4: 289-296.
6. Ślusarkiewicz-Jarzina A., Ponitka A., Wojciechowska B., Woźna J. (2000). Rapid assessment of early embryo development in some wide crosses of cereals. *J. Appl. Genet.* 41: 75-80.
7. Ponitka A., Ślusarkiewicz-Jarzina A., Wędzony M., Marcińska I., Woźna J. (1999). The influence of various *in vitro* culture conditions on androgenetic embryo induction and plant regeneration from hexaploid triticale (x *Triticosecale* Wittm.). *J. Appl. Genet.* 40: 165-174.
8. Wędzony M., Marcińska I., Ponitka A., Ślusarkiewicz-Jarzina A., Woźna J. (1998). Production of doubled haploids in triticale (x *Triticosecale* Wittm.) by means of crosses with maize (*Zea mays* L.) using picloram and dicamba. *Plant Breed.* 117: 211-215.
9. Ślusarkiewicz-Jarzina A., Ponitka A. (1997). Effect of genotype and media composition on embryoid induction and plant regeneration from anther culture in triticale. *J. Appl. Genet.* 38: 253-258.
10. Ponitka A., Ślusarkiewicz-Jarzina A. (1996). Anther culture response in F1 hybrids of winter wheat (*Triticum aestivum* L.). *J. Appl. Genet.* 37: 253-256.