

Assoc. Prof. Halina Wiśniewska

I. Personal data

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II. Education

1975 - M. Sc. Botanic, A. Mickiewicz University in Poznan, Poland
1985 - PhD Genetics, Institute of Plant Genetics Polish Academy of Sciences, Poznan, Poland
2007 –habilitation - Agronomy, University of Life Sciences, Poznan, Poland
from 2008 - the head **LABORATORY OF DISTANT CROSSES**

III. Field of specialisation

Genetics, cytogenetics ,phytopathology, agronomy,

IV. Scientific interests

- Resistance of wheat and triticale cultivars against infection by pathogenetic *Fusarium* species and accumulation of mycotoxins in kernels
- Plant molecular cythogenetics

V. Research projects

Research Project of the Ministry of Sciences and Higher Education, no NN 310435138
Study of susceptibility to leaf rust (*Puccinia triticina*) and variability of qualitative traits in introgressive lines of triticale with introgressive fragment of genom *Triticum monococcum* (2x) and heksaploid wheat (2010 – 2012): project leader.

Research Project of the Ministry of Sciences and Higher Education no. NN 310301934
”**Susceptibility of important in farming wheat cultivars (*Triticum aestivum*) to *Fusarium* head blight and toxins accumulationsin seeds**” (2008-2010); contractor

Project of the Ministry of Agriculture and Rural Development no. HOR hn – 4040 DEC – 16/08 “**Study of triticale genotypes on *Fusarium* head blight and toxins accumulation i kernels**” (2008 – 2010): project leader

Project of the Ministry of Agriculture and Rural Development no HOR hn – 4040 DEC – 15/08 “**Searching, creation and study the sources of wheat resistance to *Fusarium* head blight**” (2008 – 2010); project leader

Project of the Ministry of Agriculture and Rural Development no HOR hn – 4040 DEC – 15/08 “**Identification and introgression to genom of wheat genes determination resistance to *Pseudocercospora herpotrichoides*** ” (2008 – 2010); project leader

VI. Cooperation

- CIMMYT, Mexico, Screening Nursery–“Selection of wheat genotypes resistance to *Fusarium* head blight”
- Research Institute of Crop Production, Praha-Ruzyne, Czech Republic:
- Lublin University Life Sciences, Faculty of Phytopathology

- Laboratory of Quality and Resistance Evolution in Cereals, Plant Breeding and Acclimatization Institute , Kraków,
- Plant Breeding and Acclimatization Institute in Radzików,
- Department of Chemistry, University of Life Sciences, Poznan
“Analysis of toxin accumulation in kernels of wheat and triticale.”
- Breeding Station : “DANKO”- Choryń , Strzelce – “Breeding of cultivars and lines of wheat and triticale”

VI. Last publications:

GOLIŃSKI P., KACZMAREK Z., KIECANA I., WIŚNIEWSKA H., KAPTUR P., KOSTECKI M., CHEŁKOWSKI J. 2002. *Fusarium* head blight of common polish winter wheat cultivars- comparison of effects of *Fusarium avenaceum* and *Fusarium culmorum* on yield components. J. Phytopathology 150 :135-141.

PASCALE M., VISCONTI A., PROŃCZUK M., WIŚNIEWSKA H., CHEŁKOWSKI J. 2002. Accumulation of fumonisins, beauvericin and fusaproliferin in maize hybrids inoculated under field conditions with *Fusarium proliferatum* Mycol. Res. 106 (9): 1026-1030.

CHEŁKOWSKI J., STĘPIEŃ L., TOMCZAK M., WIŚNIEWSKA H. 2002. Identification of toxigenic *Fusarium* species in wheat ears using PCR assay and their mycotoxins in kernels. Phytopathol. Pol. 25: 47-57.

ŠIP V., CHROPOVA J., SYCOROVA S., WIŚNIEWSKA H, CHEŁKOWSKI J., PERKOWSKI J. 2002. Evaluation of wheat resistance to accumulation of *Fusarium* mycotoxin DON in grain. EUCARPIA, From biodiversity to genomics: Breeding Strategies for Small Grain Cereals in the Third Millennium–European Association for Research on Plant Breeding, 21-25 November 2002: 261-267.

TOMCZAK M., WIŚNIEWSKA H., STĘPIEŃ L., KOSTECKI M., CHEŁKOWSKI J., GOLIŃSKI P. (2002). Deoxynivalenol, nivalenol and moniliformin in wheat samples with head blight (scab) symptoms in Poland (1998-2002). European Journal of Plant Pathology 108 (7): 625-630.

WIŚNIEWSKA H. , CHEŁKOWSKI J., PERKOWSKI J., BUŚKO M., BOCIANOWSKI J.(2002). Components of resistance against *Fusarium culmorum* in spring wheat J. Appl. Genet. 43A: 345-354.

BOCIANOWSKI J., CHEŁKOWSKI J., KUCZYŃSKA A., WIŚNIEWSKA H., SURMA M., ADAMSKI T. 2003. Assessment of RAPD markers for barley doubled haploid lines resistant and susceptible to *Fusarium culmorum* at seedling and adult plant growth stages. J. Appl. Genet. 44(3): 355-360.

WIŚNIEWSKA H., STĘPIEŃ Ł., KOWALCZYK K. (2003). Resistance of spring wheat cultivars and lines to leaf rust. J. Appl. Genet. 44(3): 361-368.

WIŚNIEWSKA H., PERKOWSKI J., KACZMAREK Z. 2004. Scab response and deoxynivalenol accumulation in spring wheat kernels of different geographical origins following inoculation with *Fusarium culmorum*. J. Phytopathology 152: 613-621.

WIŚNIEWSKA H., BUŚKO M. 2005. Evaluation of spring wheat resistance to *Fusarium* seedling blight and head blight. Biologia, Bratislava 60/3: 287-293.

WIŚNIEWSKA H., KOWALCZYK K. 2005. Resistance of cultivars and breeding lines of spring wheat to *Fusarium culmorum* and powdery mildew. J. Appl. Genet. 46(1): 35-40.

CHEŁKOWSKI J., RITIENI A., WIŚNIEWSKA H., MULÈ G., LOGRIECO A. (2007). Occurrence of Toxic Hexadepsipeptides in Preharvest Maize Ear Rot Infected by *Fusarium poae* in Poland. J Phytopathology 155: 8-12.

WIŚNIEWSKA H., BASIŃSKI T., CHEŁKOWSKI J., PERKOWSKI J. 2008. Accumulation of type a trichothecenes in a bioassay inoculated with *Fusarium sporotrichiodes*. Cereal Res. Commun. 36B: 409–411.

WAŚKIEWICZ A., GROMADZKA K., WIŚNIEWSKA H., GOLIŃSKI P. 2008 Accumulation of zearalenone in genotypem of spring wheat after inoculation with *Fusarium culmorum*. Cereal Res. Commun. 36B: 401-403.

WIŚNIEWSKA H.(2008).Genotypic variation in reaction of wheat (*Triticum aestivum* L.) to *Fusarium culmorum* (W.G.Sm.) Phytopathologia Polonica 47.

WARZECHA T., ADAMSKI T., KACZMAREK Z., SURMA M., GOLIŃSKI P., PERKOWSKI J., CHEŁKOWSKI J., WIŚNIEWSKA H., KRYSKOWIAK K., KUCZYŃSKA A. (2010). Susceptibility of hulled and hullless barley doubled haploids to *Fusarium culmorum* head blight. Cereal Res. Commun. 38 (2): 220-232.

GOLINSKI P., WAŚKIEWICZ A., WIŚNIEWSKA H., KIECANA I., MIELNICZUK E., GROMADZKA K., KOSTECKI M., BOCIANOWSKI J., RYMANIAK E. (2010). Reaction of winter wheat (*Triticum aestivum* L.) cultivars to infection with *Fusarium* spp.: mycotoxin contamination in grain and chaff. Food Add. Contam, 27 (6): 1015-1024.

APOLINARSKA B., WIŚNIEWSKA H., WOJCIECHOWSKA B. (2010). *Aegilops*-rye amphiploids and substitution rye used for introgression of genetic material into rye. J.Appl. Genet. 51 (4); 413-420.

WARZECHA T., ADAMSKI T., KACZMAREK Z., SURMA M., CHEŁKOWSKI J., WIŚNIEWSKA H., KRYSKOWIAK K., KUCZYŃSKA A. (2011). Genotype – by-environment interaction of barley DH lines infected with *Fusarium culmorum* (W.G.Sm.) Sacc. Field Crop Research 120: 21-30.

WIŚNIEWSKA H., BASIŃSKI M., CHEŁKOWSKI J., PERKOWSKI J. (2011). *Fusarium sporotrichioides* SHERB. toxins evaluated in cereal grain with *Trichoderma harzianum*. Plant Protection . 51 (2): 134-139.

