

PlantLink Researcher in the spotlight

Inger Åhman

February 2015

*This month, we turn the spotlight to **Professor Inger Åhman** at the Department of Plant Breeding, SLU Alnarp. Professor Åhman was working for many years as breeder at Svalöf Weibull AB, and in 2006 she returned to SLU.*



- *What is currently on top of your research agenda, Inger?*

- I just started a new project in which we will try to mutate susceptibility genes for improved aphid resistance in crops like barley, wheat, pea and potato. Susceptibility genes for leaf blotch disease in barley are targets in another project. In addition, I do traditional cross breeding and selections for aphid and disease resistance in barley.

- *Please tell us about your latest publication?*

- Together with a PhD student and colleagues at SLU, CIMMYT and Kansas State University, I identified new resistance loci to two pest aphids in wheat via a genotyping by sequencing approach. A potential resistance factor, plant pubescence, could be discarded as such in this material that was derived from a bread wheat x synthetic hexaploid wheat cross. For this work, we actually had bioinformatic support from the former PlantLink bioinformatician Estelle Proux-Wéra.

- *What led you into your particular field of research?*

- My PhD and post doc studies dealt with insect/plant interactions. In 1988 I became responsible for breeding crops (barley, oilseed rape and salix) resistant to insects in a plant breeding company. Since 2006 I am back at the university doing pre-breeding for pest and disease resistance in barley and wheat.

- *What are the implications of your research for the society?*

- Crossings with my breeding lines in commercial plant breeding programs should lead to resistant cultivars and less need for pesticide use.

- *Finally, let's say you got unlimited research funds; where would your research be five years from now?*

- With unlimited resources, in five years I would have produced breeding lines with resistance to other important pests and diseases in cereals and in other important crops for Swedish agriculture. The methods to do that would have relied more than presently on molecular marker-based selections for resistance genes, and on mutated susceptibility genes.