

Wageningen, the Netherlands, December 22, 2016

## THE FULL BREADTH OF MENDEL'S GENETICS

Gregor Mendel's fame as founder of the laws of basic genetics is based on his experiments in pea plants (*Pisum*), published 150 years ago. Curiously, Mendel's later studies on *Hieracium* (hawkweed) are usually seen as a frustrating failure, because it is assumed that they were intended to confirm the segregation ratios he found in *Pisum*, while it is now known *Hieracium* species mostly reproduce by means of clonal seeds (apomixis). Peter J. van Dijk and T. H. Noel Ellis<sup>1</sup> show that this assumption arises from a misunderstanding that could be explained by a missing page in Mendel's first letter to Carl Nägeli.

Peter van Dijk, apomixis expert at KeyGene: "The story about Mendel's frustration about failing hawkweed experiments is based on misunderstandings. Mendel's writings clearly indicate his interest in "constant hybrids," hybrids which do not segregate, and which were "essentially different" from "variable hybrids" such as in Pisum. Mendel's first letter to Nägeli most probably missed a page, but nobody noticed this as researchers based their assumptions on later published transcripts."

Arjen van Tunen, CEO of KeyGene: "KeyGene is proud on the publication of Peter van Dijk, one of our top researchers. This publication does not only reflect an exciting story with a lot of in-depth research. It is also highly relevant because it illustrates a broader perspective of the work of one of the most important researchers in the history of plant breeding. Therefore KeyGene supported the publication of the story as open access in the journal Genetics. This safeguards that the entire research community has access to this nice piece of scientific detective work."

## About KeyGene

## *KeyGene – the crop innovation company*

KeyGene is the go-to AgBiotech company for higher crop yield & quality. With our intellectual capital, solution driven approach and collaborative spirit, we work for the future of global agriculture with partners in the AgriFood sector. Using our proprietary technologies and non-GM approaches, we support customers with the development of new and improved crops. Our goal is to help organizations with their toughest R&D challenges, combining our cutting edge breeding technologies, bioinformatics & data science expertise and plant-based trait platforms. At KeyGene, we work in an international environment with more than 140 professionals from all over the world. Our company is based in Wageningen, Netherlands and Rockville, MD, USA. www.keygene.com

## For more information please contact:

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<sup>1</sup> The Full Breadth of Mendel's Genetics

Peter J. van Dijk and T. H. Noel Ellis Genetics December 2016 204:1327-1336; doi:10.1534/genetics.116.196626 **OPEN ACCESS ARTICLE** http://www.genetics.org/content/204/4/1327