

## EDITORIAL

The theme of this year's double issue of Folia Mendeliana journal is Mendel's Journeys. The authors of the first paper entitled *Mendel's journey to Paris and London: context and significance for the origin of genetics* are Peter J. van Dijk and T. H. Noel Ellis and their contribution deals with many new sources of information from digitized newspapers. The authors have found a partial list of participants in the second 1862 pleasure train (Vergnügungszug) from Vienna to Paris and London, which includes Mendel's name. The names of 158 participants make a reconstruction of the travel group possible. The article then focuses especially on the possible scientific connections between Mendel and his colleague Johann Nave from the Nature Research Society in Brno.

The second contribution by Peter J. van Dijk is entitled *Mendel's journey to Italy in the 1860s*. The author brings new evidence and arguments that it is very likely that Mendel took part in a three weeks' organized group tour to Italy in September 1863. It is also very interesting that this tour was arranged by the same organizers as Mendel's group tour to the International Exhibition in London a year earlier. These Mendel's trips abroad had to be financially and physically demanding. This shows his great interest in the world and society and also the fact that he was not just an Augustinian monk hidden behind the walls of the monastery.

*Jiří Sekerák*

## MENDEL'S JOURNEY TO PARIS AND LONDON: CONTEXT AND SIGNIFICANCE FOR THE ORIGIN OF GENETICS

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*ABSTRACT - From a letter Gregor Mendel wrote to his brother-in-law, and a photograph of a large group of people in Paris, it is known that Mendel visited the International Exhibition in London in August 1862. There has been speculation about the status and composition of this travel group; for example, whether it was an official delegation from the city of Brünn. There has also been speculation on whether Mendel visited Charles Darwin on that occasion. We have now found a partial list of participants of the second 1862 pleasure train (Vergnügungszug) from Vienna to Paris and London, which includes Mendel's name. The names of 158 participants make a partial reconstruction of the travel group possible. Digital newspapers were researched to get more insight into the status, residence, and profession of the participants. Most belonged to the upper-class of the Austrian Empire, among them several citizens of Brünn. Such luxurious all-inclusive pleasure trains were a new phenomenon in Vienna at the time and received much attention in the newspapers. Gregor Mendel was one of the first to participate in this expensive new trend. The person next to Mendel in the photograph shows a clear resemblance with Johann Nave in the photograph of the founding members of the Natural Science Society of Brünn the same year (see Figs. 1 and 5). The newspaper lists of arrivals in Viennese hotels shows that Johann Nave, was in Vienna when the pleasure train departed. Johann Nave was an internationally acknowledged algae expert with interest in plant reproductive processes. In 1858 Mendel had nominated Nave as a new member of the scientific section of the Agricultural Society. A scientific connection between Mendel and Nave has been conjectured previously; however, evidence was lacking so far. After his early death in 1864, Nave's scientific library was acquired by the Natural Science Society. It contained books about the latest insights on plant fertilization, and since Mendel's 1866 - paper contains a lengthy footnote about this topic, Mendel and Nave likely discussed this area of Mendel's research. This may also have been the case during their journey to Paris and London because it was in 1862 that Mendel conducted the final crossing experiments to test his hypothesis about the composition and the random union of pollen and egg cells. (376)*

### WHAT WAS KNOWN ABOUT MENDEL'S TRAVEL TO PARIS AND LONDON?

Hugo Iltis (1882-1952), Mendel's first biographer, collected information about Mendel's life through interviews with people who had known Mendel. By then, Mendel

## GREGOR MENDEL'S MEETING WITH POPE PIUS IX: THE TRUTH IN THE STORY

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*ABSTRACT* - According to Hugo Iltis, Mendel had made a journey to Italy in the 1860s, not knowing when or for what purpose. Mendel might then have also paid a visit to Pope Pius IX, and become acquainted with the "later" Cardinal Theodolfo Mertel. Oswald Richter had already discovered that Mendel had received a 3-months pass for the Italian states in mid-August 1863. In this article, I put forward new evidence and arguments that it is very likely that Mendel took part in a three weeks' organized group tour to Italy in September 1863. This tour was organized by the same entrepreneurs as Mendel's group tour to the International Exhibition in London a year earlier. In Rome, the group was received by the Pope. Furthermore, there were stays of several days in Naples and Florence. Because Mertel had already become Cardinal four years before this trip, this part of the story about Mertel cannot be correct. I argue that it is likely that the high dignitary whom Mendel met was Karl von Hefele, professor of church history, spokesman for the group at the meeting with the Pope. It is striking that in 1862 and 1863, Mendel could make expensive international trips, which were only affordable to the societal elite. These major international journeys illustrate Mendel's broad interest in the world and the society of his days and contrast the view that he was a monk in recluse.

### INTRODUCTION

Although Gregor Mendel is one of the greatest biologists in history, his life, and work, as a result of his posthumous recognition, is still surrounded by many mysteries. His name is world-famous, but as a person, he is largely unknown. These mysteries include the great international journeys he undertook in the 1860s, first to Paris and London in 1862 and later to Rome. Recently Van Dijk and Ellis (2020) have published new information about the journey to Paris and London, and here I report new information regarding the journey to Rome.

We owe most of what is known about the life of Gregor Mendel to Hugo Iltis, Mendel's first biographer. Shortly after the 'rediscovery' of Mendel's work in 1900, Iltis began to collect information from people who had known Mendel. One of their memories was that Mendel had told about a trip to Italy, where he would have met Pope Pius IX and became acquainted with the "later" Cardinal Mertel. Augustinian Father Clemens Janetschek (1857-1908) suspected that it was around 1864 when Mendel was still an ordinary priest. According to Mendel's nephew, Alois Schindler (1859-1930), Mendel had made the journey as a newly elected abbot, in 1868, to introduce himself to the Pope, an assumption which was accepted by Gustafsson (1969, "to pay his respects to the Pope") and Bishop (1999, "to be received by the Pope").

## THE INTERNATIONAL MENDEL DAY 2020 IN AUSTRIA

After London in 2019, Vienna/Austria has been hosting the 2020 edition of the International Mendel Day which was celebrated on March 6, 2020 in the ceremony hall of the University of Natural Resources and Life Sciences (Universität für Bodenkultur / BOKU). Gregor Mendel had a multitude of connections with the city of Vienna throughout his scientific and ecclesiastical careers. Reciprocally, Vienna is honoring Mendel in such ways as naming the university street “Gregor Mendel Strasse”. And the local Mendel society, Gregor-Mendel-Gesellschaft-Wien has been the organizer of the 2020 meeting, which brought inspiration and diversity in both arts and science to the participants of the event.

Hermann Bürstmayr (president, Gregor Mendel Society of Vienna) and Eva Matalova (Mendelianum Brno) opened the meeting with their welcome addresses. Daniel Fairbanks (Utah Valley University, Orem, UT) had created an expressive Gregor Mendel portrait bust in bronze, which was unveiled and presented to the Mendel society of Vienna



Fig. 1. Prof. Hermann Bürstmayr (President, Gregor-Mendel-Gesellschaft-Wien) and Prof. Eva Matalová (Mendelianum Brno) opening the International Mendel Day 2020.

## MENDEL MEMORIAL MEDAL 2020

The medalist of the Mendel Memorial Medal for the year 2020 is Professor Johann Sölkner, who earned it for his promotion of Mendel's legacy through the Gregor Mendel Society of Vienna. Johann Sölkner from University of Natural Resources and Life Sciences, BOKU, Vienna is an outstanding laureate. He is professor of animal genetics/animal breeding, Head of Division of Livestock Sciences and he is in the board of the Gregor Mendel Ges. Wien. He was the president of this society in the period before prof. Hermann Bürstmayr.

Johann Sölkner has a quite impressive list of publications. He is the author or co-author of more than 180 scientific articles and publications and the bearer and participant of numerous grants and international scientific projects founded on wide international scientific cooperation. He has many world-wide collaborators including F. Nicholas from Sydney and others. He is working on various problems of livestock breeding, programs from Lipizza horses (suffering from inbreeding because of the very small population) to



Fig. 1. Prof. Johann Sölkner (BOKU, Vienna). Photo credit: Lorenz Vollmann.



## SPRING HOLIDAYS IN THE MENDELIANUM CENTRE, FEBRUARY 19, 2020

In 2020, there were not many opportunities for holding public events. During a part of the year events were banned and the museum closed due to coronavirus restrictions. However, the year 2020 began optimistically.

The spring holidays fell in Brno on the week from 17 to 21 February. The Children's Museum/Moravian Museum traditionally organizes a weekly program for children aged 6–10 in exhibitions or other workplaces of the Moravian Museum.

The Mendelianum offered a program in Wednesday, February 19. We prepared several activities related to genetics and molecular biology and suitable for such small children, too. Introduction to microorganisms – experiments with baker's yeast: Yeast inflating a balloon and observation of yeast under a microscope. Heredity in the family – search for hereditary traits. Chromatography of plant leaf pigments.

These newly prepared activities can now be carried out by visitors of the permanent exhibition.

*Pavčina Pončíková*



## THE INTERNATIONAL MENDEL DAY IN BRNO, MARCH 8, 2020

The International Mendel Day 2020 was celebrated not only in Vienna, but also in Brno. The Mendelianum prepared a program for Sunday this year. Without knowing it previously, it was the last day the museum was open to the public before two months closing. We were surprised by the considerable interest of the public and in many children we met former participants to the programme during the spring holidays.

The program consisted of two separate parts: for children and their parents in our laboratory; and for people interested in history a walk through Mendel's Brno.

In the early evening (after returning from the walk and ending activities in the laboratory), we all watched the documentary film Mendel's Constant Challenge from 2010, in the creation of which the Mendelianum had participated.

*Petra Elblová*



## MENDEL'S BIRTHDAY, JULY 22, 2020

For several years, we have been celebrating Mendel's birthday in the circle of our friends and colleagues from the Moravian Museum. These celebrations are situated into the authentic premises where Mendel's scientific Society was located. This was the Society where Mendel worked actively for 30 years, where he kept discussions with his colleagues and where he got inspired for his later world famous research.

This year, we left out the traditional big cake (the biggest one could find in Brno) because with last year's high participation, each person had an absurdly small piece of cake or even nothing at all. That is why we decided to bake smaller pastry and various biscuits according to the preserved cookbook of Luisa Ondráčková, who had worked in the Old Brno monastery as a cook when Mendel was Abbot. From one type of biscuits, called Brno cookies in her cookbook, we formed a model of dihybrid crossing.

*Pavčina Pončíková*





## Contents

### FOLIA MENDELIANA 56/1-2 2020

Jiří SEKERÁK: Editorial .....	3
Peter J. van DIJK, T. H. Noel ELLIS: Mendel's journey to Paris and London: context and significance for the origin of genetics .....	5
Peter J. van DIJK: Gregor Mendel's meeting with Pope Pius IX: the truth in the story .....	35

### THE CHRONICLE

Johann VOLLMANN: The International Mendel Day 2020 in Austria .....	51
Petra ELBLOVÁ: Mendel Memorial Medal 2020 .....	55
Pavína PONČÍKOVÁ: Spring Holidays in the Mendelianum Centre, February 19, 2020 .....	57
Petra ELBLOVÁ: The International Mendel Day in Brno, March 8, 2020 .....	59
Pavína PONČÍKOVÁ: Mendel's birthday, July 22, 2020 .....	61