

## Anniversary

# Centenary (1916–2016) of pollen analysis and the legacy of Lennart von Post

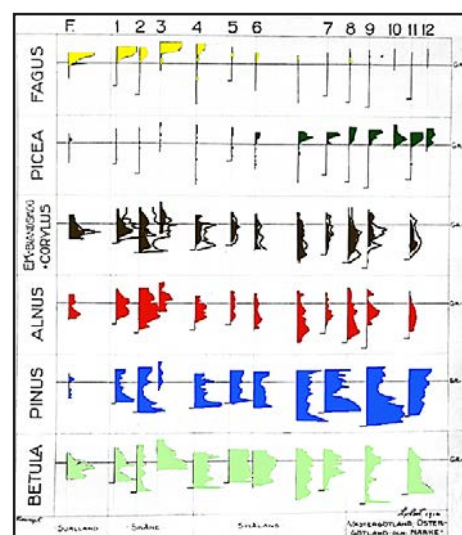
The Royal Swedish Academy of Sciences, with the generous support of the Linnaeus University, the Swedish Research Council, the Swedish Research Council for Environment, Agricultural Sciences and other institutions, hosted in Stockholm a two-day symposium (24–25<sup>th</sup> November 2016) to celebrate the centenary of the first pollen diagram presented by the Swedish geologist Lennart von Post (Fig. 1) and to examine his legacy to the science of pollen analysis and vegetation history. More than 150 participants from several generations, ranging in age from 25 to 89 years and involved in palynology and paleoecology across the world attended this meeting. The scientific program included three thematic sessions (*PAST – Lennart von Post and the development of pollen analysis*, *PRESENT – Current developments and research topics*, *FUTURE – Visions for the future of pollen analysis*) and a final round-table discussion. The keynote lectures were given by 24 speakers (Prof. B. Berglund, Prof.

J. Birks, Prof. M-J. Gaillard, Prof. K. Edwards, Prof. H. Hooghiemstra, Prof. P. Tzedakis, Prof. E. Grimm, Prof. R. Bradshaw and others) from different countries. These scientists have played an important role in the development of pollen analysis as a methodological tool for the reconstruction of climate, vegetation, landscapes, and biodiversity of the past, and the use of this knowledge for addressing current and future ecological issues. The scientific program also comprised a poster session with about 40 presentations and an exhibition of von Post's original pollen diagrams, equipment, field notebooks, and photographs.

The Bulgarian palynologists Prof. E. Bozilova and Prof. S. Tonkov from Sofia University were invited by the Organizing Committee to join this jubilee celebration. They presented a poster entitled *On the history of pollen analysis in the Vitosha Mountain, Bulgaria (1934–2016)*, co-authored also



Photo of Lennart von Post (1884–1951)



**Fig. 1.** Lennart von Post's synthetic pollen diagram from 12 sites in south Sweden presented at 1916 Scandinavian scientists meeting in Kristiania (later coloured).

by Prof. G. Possnert (Radiocarbon Dating Laboratory, Uppsala University). The audience became familiar with the pioneer steps of the palynological studies in Bulgaria conducted on peat deposits from the Vitosha Mountain (Stojanoff & Georgieff 1934), expanded further by a number of pollen diagrams from sites located between 1400 m and 2200 m a. s. l. (Petrov 1956; Filipovitch 1988). Research activity into the Holocene vegetation history and human impact in the mountains was resumed recently with the publication of percentage and influx pollen diagrams from a new peat profile supported for the first time by a detailed radiocarbon chronology (Tonkov & Possnert, 2016).

Today, pollen analysis plays an ever greater role in ecology, Earth-system science, and biogeography by providing long-term overviews of the population dynamics and ecosystem development. It provides ecology and biogeography with the fourth dimension of detailed history: their paleoecology. Von Post would have been amazed and delighted (Birks & al. 2016).

## References

**Birks, J., Birks, H. & Ammann, B.** 2016. The fourth dimension of vegetation. – *Science*, **354**(6311): 412-413.



The participants of the symposium (photo by Simon Ungman Hain, The Royal Swedish Academy of Sciences)

**Filipovitch, L.** 1988. Vegetation history of the high parts of Vitosha Mountain during the late postglacial time. – *Fitologija*, **34**: 25-41 (in Bulgarian).

**Petrov, S.** 1956. Peat bogs nearby springs in the spruce forests of Vitosha Mountain. – *Bull. Bot. Inst. BAS*, **5**: 293-346 (in Bulgarian).

**Stojanoff, N. & Georgieff, T.** 1934. Pollenanalytische Untersuchungen auf dem Vitosa-Gebirge – *J. Bulg. Acad. Sci.*, **17**(25): 73-104.

**Tonkov, S. & Possnert, G.** 2016. A new Late Holocene pollen diagram from Vitosha Mountain. Vegetation history and anthropogenic impact. – *C. R. Acad. Bulg. Sci.*, **69**(3): 327-336.

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