

Hans-Voldemar Trass 02.05.1928–14.02.2017 in memoriam



- 2 May 1928 – born in Tallinn, in the family of military officer Hartmut Trass
- 1942–1947 – studies in the Tallinn Secondary School no. 10
- 1947–1952 – biology studies in the University of Tartu
- 1952–1955 – doctoral studies
- 1955 – dissertation “Flora and vegetation of the West-Estonian eutrophic mires”, degree of the Candidate in biology (= Ph.D.)
- 1955–1971 – senior lecturer and associate professor in the University of Tartu
- 1956–1991 – head of the Dept. of Plant Systematics and Geobotany, University of Tartu
- 1964–1973, 1985–1991 – president of the Estonian Naturalists’ Society, honorary president from 1991
- 1969 – doctoral dissertation “The analysis of the Estonian lichen flora” (in Russian), degree of D.Sc.
- 1971–1993 – professor in the University of Tartu
- 1975 – corresponding member of the Academy of Sciences of the Estonian S.S.R.
- 1978–1988 – chairman of the Estonian national committee of the UNESCO program “Man and Biosphere”
- 1989 – full member of the Estonian Academy of Sciences
- 1992 – Acharius Medal from the International Association for Lichenology
- 1994 – professor emeritus
- 1998 – Order of Merit of the White Star, III class (national honour medal)
- 2002 – memory book “Alone and with others” (in Estonian)
- 2006 – honour citizen of Tartu
- 2010 – collection of articles “Tender-severe Nature and Man” (in Estonian)
- 14 February 2017 – died in Tartu

Glimpses of memories of his students

We were deeply distressed to hear of the death of Hans Trass, whom we knew as an outstanding scientist, charismatic person, our long time mentor and good friend. The death is always sudden.

In 1958, the first meeting on the Leningrad–Tallinn train. Hans Trass and his students were on their way back from a field expedition to Kola Peninsula, and I, a schoolboy, was on my way home from the Caucasus Mountains after graduating from the mountains guide school. A friendly chat in a railway car and no strong suggestions about my future plans concerning the university next year.

Admission to the University of Tartu: geology or biology? Again, what are your interests? Not so clear, anthropology or geology, or something else. Finally, Hans Trass recommended to observe what was growing on the rock surface if you were going to be hanging on ropes over cliffs and climbing rocks anyway. Well, it was an important decision, and the graduation thesis which was completed (1964) and later published under his supervision focussed on the elevational distribution of lichen species in the Greater Caucasus Mountains and at high elevations of the Tian Shan.

One happy event took place on the way back from Kazakhstan, where we had reported about our contract research on semidesert vegetation, which was supervised by Hans Trass. During the stop in Sverdlovsk (now Ekaterinburg) we had a joint meeting with the well-known botanist and

ecologist Pavel Gotshakovsky, quondam head of plant ecology department at the Institute of Plant and Animal Ecology. He was interested in polar lichens and lichen indicational studies. This was a challenge for me, and I received full support from Hans. It was also a landmark for several Estonian lichenologists who later defended their Ph.D. theses in the field of pollution indication at this institution.

A few comments on science history where Hans Trass was deeply involved. His monograph „Vegetation science: history and contemporary trends of development“ was published in 1976, but was actually planned much earlier as his thesis for Doctor of Science. The main reason for this delay due to the fact that Hans Trass had heard that Robert Whittaker was preparing a world review on the classification of plant communities. Hans Trass was considerate and decided to analyse the main trends of vegetation science in relation to Northern and Eastern European traditions.

Another note from science history. Hans Trass published his first results on lichen indicational research on air pollution in 1968, in the local semi-scientific journal “Eesti Loodus”. He proposed a new quantitative measure of air pollution impact on epiphytic lichen cover, later very widely used Index of Poleotolerance (IP). Exactly in the same year, 1968, Canadian scientists F. LeBlanc and J. DeSloover published their Index of Atmospheric Purity (IAP). Both indices can be successfully employed in air pollution monitoring research. The coincidence of good ideas can be surprising.

Jüri Martin and Ljudmilla Martin

Selected lichenological papers by Hans Trass

In English:

- Trass, H. 1973. Lichen sensitivity to air pollution and index of poleotolerance (I.P.). *Folia Cryptogamica Estonica* 3: 19–22.
- Trass, H. 1981. Composition and anthropogeneous changes of the lichen flora and vegetation in Estonia. In: L. Laasimer (ed.): Anthropogeneous Changes in the Plant Cover of Estonia. Academy of Sciences of the Estonian S. S. R., Tartu, pp. 135–153.
- Trass, H., Randlane, T. & Piin, T. 1985. On the chemistry of genus *Asahinea* (Lichens). *American Journal of Botany* 72(6): 790–791.
- Trass, H. & Randlane, T. 1987. Extinct macrolichens of Estonia. *Folia Cryptogamica Estonica* 25: 1–7.
- Trass, H. 1988. Cryptoindication of the level of atmospheric air pollution and ecological monitoring. *Acta et Commentationes Universitatis Tartuensis* 812: 25–31.
- Trass, H. 1990. Mapping of threatened lichens in USSR and general considerations on a European project. *Stuttgarter Beiträge zur Naturkunde, Ser. A* Nr. 456: 35–39.
- Trass, H. 1992. A new species of *Asahinea* (Ascomycotina, Parmeliaceae). *Folia Cryptogamica Estonica* 29: 31–32.
- Trass, H. 1992. Synopsis of the lichen genus *Heterodermia* (Ascomycotina, Physciaceae sive Pyxinaceae). *Folia Cryptogamica Estonica* 29: 1–24.
- Trass, H. 1994. Corrections and additions to the flora of the lichen genus *Cladonia* in Estonia. *Acta Botanica Fennica* 150: 201–208.
- Trass, H. 1997. Lichen mapping in Europe: *Letharia vulpina*, *Menegazzia terebrata*. *Proceedings of the Estonian Academy of Sciences, Biology, Ecology* 46(4): 195–213.
- Trass, H. 1998. Erasmus Mycophilus. *Folia Cryptogamica Estonica* 33: 5–7.
- Trass, H. 1998. Lichen mapping in Europe: an experience with two species. *Sauteria* 9: 181–219.
- Trass, H. 1998. List of physcioid macrolichens of Russian Far East and Siberia. *Folia Cryptogamica Estonica* 33: 147–151.

Jüriado, I., Lõhmus, P., Martin, J., Martin, L., Nilson, E., Piin, T., Randlane, T., Saag, A. Saag, L., Sarv, M., Suija, A., Temina, M. & Trass, H. (eds T. Randlane & A. Saag) 1999. Second checklist of lichenized, lichenicolous and allied fungi of Estonia. *Folia Cryptogamica Estonica* 35: 1–132.

Trass, H. 2000. The lichen genus *Heterodermia* (Lecanorales, Physciaceae) in Russia and adjacent territories. *Folia Cryptogamica Estonica* 37: 93–108.

Trass, H. & Randlane, T. 1991. The Swedish lichenologists and the Estonian flora. *Folia Cryptogamica Estonica* 28: 1–4.

Trass, H., Vellak, K. & Ingerpuu, N. 1999. Floristical and ecological properties for identifying of primeval forests in Estonia. *Annales Botanici Fennici* 36: 67–80.

In Estonian: numerous articles, and two books, viz.

Trass, H. 1958. Eesti NSV kladooniade (põdrasamblike) määraja. [Bestimmungstabellen der Cladonien estnischer SSR.]. *Abiks Loodusevaatlajale* (Loodusuurijate Selts Eesti NSV Teaduste Akadeemia juures) 39: 1–116 pp. [58 *Cladonia* species with descriptions and keys. Russian and German summaries.]

Trass, H. & Randlane, T (eds.) 1994. *Eesti Suursamblikud*. Tartu. 399 pp. [*Macrolichens of Estonia*. Treatment of 382 species of macrolichens, including descriptions and keys. In addition to the two editors, 11 other authors contributed to the various parts of this volume: S. Liiv, E. Nilson, J. Martin, L. Martin, E. Parmasto, A. Pärn, J. Püttsepp, A. Roosma, A. Saag, E. Sander, and K. Zobel. Illustrations were prepared by T. Aimla.]

In Russian:

Trass, H. 1963. *Glossodium japonicum* – a new lichen in the U.S.S.R. *Papers on Botany, Transactions of the Tartu State University* 6: 201–202. [In Russian; English summary.]

Trass, H. 1963. On the lichen flora of Kamchatka. In: *Investigationes Naturae Orientis Extremis* (Academy of Sciences of the Esto-

- nian R.S.S.), Tallinn, Estonia, pp. 170–220. [In Russian; English summary.]
- Trass, H. 1963. On the vegetation around hot water well springs and geysers of Geyser Valley, Kamchatka. In: *Investigationes Naturae Orientis Extremis*. Academy of Sciences of the Estonian R.S.S., Tallinn, Estonia, pp. 112–146. [In Russian; English summary.]
- Trass, H. 1969. V. Räsänen, an eminent Finnish lichenologist. (August 24, 1888–July 16, 1953). *Botanicheskii Zhurnal* [Moscow & Leningrad] 54: 956–957. [In Russian.]
- Trass, H. 1970. The elements and development of the lichen-flora of Estonia. *Papers on Botany, Transactions of the Tartu State University* 9: 5–233. [In Russian; English summary, pp. 222–230.]
- Piin, T. & Trass, H. 1971. The lichens growing on the soil surface in the vicinity of Tareta (western Taimyr). In: *Biogeocenoses of Taimyr Tundra and their Productivity*. Acad. Sci. USSR, Sov. Natl. Committee for I.B.P., V. L. Komarov Bot. Inst., Nauka, Leningrad, pp. 151–160. [In Russian; English summary.]
- Trass, H. 1972. A list of species of Cladoniaceae in the lichen flora of the USSR. *Folia Cryptogamica Estonica* 1: 1–8. [In Russian; English summary.]
- Trass, H. 1973. Lichens. *Priroda* 3: 10–20. [In Russian.]
- Trass, H. 1974. *Umbilicaria decussata* in Estonia. *Folia Cryptogamica Estonica* 4: 28–30. [In Russian.]
- Golubkova, N. S. Savicz, V. P. & Trass, H. H. 1978. *Handbook of the Lichens of the U.S.S.R. 5. Cladoniaceae–Acarosporaceae*. Nauka, Leningrad. 303 pp. [In Russian.]
- Trass, H. 1978. New and rare taxa of Cladoniaceae in the lichen-flora of the U.S.S.R. *Folia Cryptogamica Estonica* 11: 1–8. [In Russian; English summary.]
- Trass, H. 1981. On systematics of *Phaeophyscia hispidula* (Ach.) Essl. *Folia Cryptogamica Estonica* 15: 1–2. [In Russian.]
- Trass, H. 1983. Modern literature on lichens in the USSR (1980–1981). *Bulletin of the Moscow Society of Naturalists. Section Biology* 88: 107–112. [In Russian.]
- Trass, H. 1984. Bioindication of the city atmospheric conditions. In: *Ecological Aspects of Urban Systems*. Byelorussian Committee for the UNESCO Programme “Man and the Biosphere”. Nauka i Tekhnika, Minsk, pp. 96–109. [In Russian.]
- Trass, H. 1985. Modern literature on lichens in the USSR (1982). *Bulletin of the Moscow Society of Naturalists. Section Biology* 90: 115–119. [In Russian.]
- Trass, H. 1985. Modern literature on lichens in the USSR (1983). *Bulletin of the Moscow Society of Naturalists. Section Biology* 90: 137–141. [In Russian.]
- Trass, H. 1986. Modern literature on lichens in the U.S.S.R. (1984). *Bulletin of the Moscow Society of Naturalists. Section Biology* 91: 102–106. [In Russian.]
- Trass, H. 1986. *Sphaerophorus globosus* in the lichen flora of Estonia. *Folia Cryptogamica Estonica* 21: 11. [In Russian; English abstract.]
- Trass, H. & Randlane, T. 1986. Lichen species of Estonia in need of protection. *Folia Cryptogamica Estonica* 21: 1–3. [In Russian; English abstract.]
- Trass, H. 1987. *Cladonia maxima* (Asah.) Ahti in Estonia. *Folia Cryptogamica Estonica* 25: 12–15. [In Russian; English abstract.]
- Trass, H., Pärn, A. & Zobel, K. 1988. Lichen indicational evaluation of the air pollution level in the southern Lake Baikal region. *Papers on Botany, Acta et Commentationes Universitatis Tartuensis* 812: 32–46. [In Russian; English abstract.]
- Trass, H. 1989. Modern literature on lichens in the USSR (1985, 1986). *Bulletin of the Moscow Society of Naturalists. Section Biology* 94(3): 130–137. [In Russian.]
- Pärn, A. & Trass, H. 1990. Epiphytic lichens of mountain forests of the Khamar–Daban mountain range (the Baikal region). *Botanicheskii Zhurnal* [Moscow & Leningrad] 75(3): 358–368. [In Russian.]