

## IN MEMORIAM Professor Ana Šarić



Professor ANA ŠARIĆ, D. Sc., who was a long-term university professor at the Faculty of Agriculture in Zagreb, died in Zagreb on 16 June 2001.

Ana Šarić began her life's journey on 8 June 1916 in Opuzen. She finished high school in Split in 1934 and graduated in 1939 from the Faculty of Agriculture and Forestry of the University of Belgrade. After graduation she worked for a while at the Agricultural Station in Split. From 1945–1949 she worked in the Institute of Agriculture in Zagreb. In 1946/7 she enrolled as a student in the Biological Department of the Faculty of Science in Zagreb and graduated in 1950. She earned her doctor's degree from the University of Zagreb in 1955 with the thesis: *Research into Myxobacteria on Yugoslav soils*. She got her *habilitation* degree in 1959 at the Faculty of Agriculture, Zagreb, with the paper: »A contribution to timber blue staining fungi« and the *habilitation* lecture had the title »*Antitoxic and antiinfection plant reactions*«. Ana Šarić completed her specialisation in virology in 1957 at the Mycology and Virology Department in Pavia under the supervision of Professor R. Cifferi. At the Faculty of Agriculture in Zagreb she was elected assistant in the Department of Botany in 1949. In 1954 she moved to the Department of Plant Pathology where she worked until she was retired. She was elected assistant in 1962, associate professor in 1968 and professor in 1973.

Professor Šarić held lectures in the graduate and post-graduate courses at the Faculty of Agriculture in Zagreb, post-graduate courses at the Faculty of Biotechnology in Ljubljana and at the Dipartimento di Biologia Applicata alla Difesa delle Piante at the University of Udine.

She was a member of many professional associations. In addition to other memberships in phytopathological associations (The American Phytopathologists Society, The Association of Phytopathologists of Mediterranean Countries, Croatian Plant Protection Organisation), it is worth emphasising that in 1964 she was one of the founders and a respected member of the International Organisation for Grapevine Virus and Virus-Like Diseases.

Participating regularly in many congresses, advisory meetings and symposia at home and abroad she remained in touch with many expert virologists almost until her death. As she spoke several foreign languages (French, English, Italian, German, Russian), contacts with experts from all areas of virology were easily achieved and carefully nurtured. Consequently, she was often informed of virological news even before it was published.

It could be said that there was hardly a significant virological institution in Europe with which Prof. Ana Šarić did not collaborate. This is best confirmed by the many condolences

that have arrived (Academic J. Maček – Ljubljana, Dr. A. Corte – Genova, Prof. E Reffati, Prof. R. Osler-Udine, Prof. M. Conti, Drs O. Lovisolao, E. Luisoni, V. Lisa, R. Milne-Torino, Prof. R. Bovey-Prangi – Switzerland, Dr. M. Ranković and Dr. I. Dulić-Čačak-Yugoslavia), and an obituary notice in the Petria journal and ICVG Newsletter.

In conditions of modest financial resources, with much self-sacrifice and enthusiasm, she set up the virological laboratory at the Faculty of Agriculture in Zagreb. She readily mastered and applied new techniques. Research was always directed at the most up-to-date events in the science of phytopathology.

Her retirement did not sign her departure from our branch of studies. For years she worked on projects on plant virology within the Virological Laboratory at the Faculty of Science. She published over 80 papers, alone or as co-author, mostly in recognised international journals. Her last paper was published in the year 2000.

The sphere of her scientific activity can be divided into several fields. The first papers referred to the field of botany, then phytopathogenic fungi and bacteria. She was the first in Croatia to determine *Peyronellea glomerata*, *Stereum purpureum*, and to warn of wood-destroying fungi in mines. The following phase included research into *Bacillus thuringiensis* and bacteriophages, while Myxobacteria was the field in which she earned her doctor's degree.

Together with Professor M. Panjan and Academician D. Miličić – the founders of plant virology in Croatia, Dr. A. Šarić began studying agricultural phytoplasmas and viruses. The objects of research were phytoplasmas on tomatoes, pears, apples, and viruses of cherries, plums, peaches, lettuce, soya, carnations and other cultivated plants.

Still, her greatest love remained viruses and grapevine phytoplasmas, the field in which her contribution was the greatest. She gave a timely warning of the appearance of some quarantine diseases in Croatia e.g. *Citrus tristeza* and *Bois Noir*. She was the first to describe many viruses in Croatia.

She did not forget the practical applicability of her research concerning the choice of pathogen tested material, fruit-trees (apple and citrus fruits) in PIK Neretva and the grapevine in Jastrebarsko area. The first apple and grapevine nursery plants that were certified in Croatia as virus tested material were produced under her supervision.

The width of her humanistic education and erudition were an impressive part of her personality. All of us who collaborated with her will remember the width of her education, both humanistic and biological. Today, when our emotions and thoughts have calmed, we can look back and with even greater respect and admiration feel proud that she was and still is with us.

As an expert phytopathologist and teacher she made a significant contribution to the education of many generations of agronomists and her scientific work enhanced the reputation of Croatian science and the development of its economy. This has left a lasting trace in Croatian virology.

We thank Professor Ana Šarić, for everything she gave us as a scientist, a teacher and a human being.

Prof. B. Cvjetković-Monti

Head of the Department of Plant Pathology, Faculty of Agriculture,  
Svetošimunska cesta 25, 10000 Zagreb, Croatia

**List of publications:**

- ŠARIĆ-SABADOŠ, A., 1951: Poljoprivredna istraživanja primorskih livada i kamenjara. Biljna proizvodnja 4, 161–165.
- ŠARIĆ-SABADOŠ, A., 1953: Prilog poznavanju miksobakterije *Polyangium cellulorum* var. *rosaceum*. Period. Biol. 7, 334–336.
- ZAMOLA, B., ŠARIĆ, A., SIDOR, Ć., 1957: *Bacillus thuringiensis*: mikroorganizam upotrebljiv protiv štetočina. Kem. Indust. 34, 623–629.
- MILATOVIĆ, I., ŠARIĆ-SABADOŠ, A., 1956: Cytospora – rak topole. Šum. list 3–4, 120–124.
- ŠARIĆ-SABADOŠ, A., 1957: Istraživanja miksobakterija u raznim tipovima tala. Rad. knj. JAZU 312, 5–29.
- ŠARIĆ-SABADOŠ, A., 1957: Prilog poznavanju mikoflore nekih jugoslavenskih rudnika ugljena. Acta Bot. Croat. 16, 113–128.
- ŠARIĆ-SABADOŠ, A., 1957: Contribution à la connaissance de la mycoflore de certaines mines de charbon en Yougoslavie. Proc. 4. Congrès International de Lutte contre les Ennemis des Plantes, Hamburg, 71–73.
- ŠARIĆ-SABADOŠ, A., 1958: Plavilo ležećeg drva. Zašt.bilja 47/48, 223–226.
- ŠARIĆ-SABADOŠ, A., 1958: Olovna bolest bresaka. Bilj. Zaštita 10/11, 180–181.
- ŠARIĆ, A., CORTE, A., 1959: Sintomatologia della degenerazione infetiva della vite in Istria. Atti Ist. Bot. Lab, Crit Univ. Pavia 17, 3–8.
- ŠARIĆ, A., MILATOVIĆ, I., MASTEN, V., 1959: *Peyronellaea glomerata* als Erreger der Vertrocknung der Blüten und jungen Trauben der Weinrebe in Jugoslavia. Atti Ist. Bot. Lab. Crit. Univ. Pavia 18, 101–107.
- ŠARIĆ-SABADOŠ, A., SEIWERTH, V., 1959: Olovna bolest breskve u području sjevernog Jadrana. Zašt. Bilja 54, 87–92.
- ŠARIĆ, A., MILATOVIĆ, I., 1960: Pokus suzbijanja rđe topola u šumskom rasadniku Banova Jaruga. Šum. List 84, 290–291.
- ŠARIĆ-SABADOŠ, A., 1960: Ispitivanje utjecaja sterilizacije na otpornost drva prema gljivama truleži. Drvna Industrija 5/6, 77–78.
- ŠARIĆ, A., 1960: Degeneracija loze u Istri. Bilj. Zaštita 1, 3–5.
- ŠARIĆ, A., PANJAN, M., 1961: Trasmissione su piante erbacee delle virosi delle vite. Riv. Patol. Vegetale 3, 293–297.
- ŠARIĆ, A., 1961: Dva tipa virusnih bolesti kruške. Agron. Glasnik 10/12, 21–23.
- ŠARIĆ, A., 1961: Mozaik jabuke. Bilj. Zaštita 1, 12–13.
- ŠARIĆ-SABADOŠ, A. 1962: *Trifolium subterraneum*. Biljna Proizvodnja 4, 263–264.
- ŠARIĆ, A., 1962: Infektivna degeneracija loze. Bilj. Zaštita 4–5, 109–111.
- ŠARIĆ, A., PANJAN, M., 1963: Complex of viruses in sweet cherry in Yugoslavia. Phytopath. Mediterr. 2, 181–183.
- PANJAN, M., ŠARIĆ, A., 1963: Serološka dijagnostika arabis mozaik virusa iz vinove loze i trešnje gel-difuzionom metodom. Agron. glasnik 3, 204–206.
- ŠARIĆ, A., PANJAN, M., 1964: Research work on plant virus diseases. Riv. Patol. Vegetale 3, 499–505.

- ŠARIĆ, A., ZAJEC, V., 1964: Morfološko-biološka svojstva jednog soja *Bacillus thuringiensis* Berliner primjenjenog u suzbijanju gubara u prirodi. Proc. Suzbijanje gubara, Zagreb, 18–24.
- ANDROIĆ, M., ŠARIĆ, A., 1964: Djelovanje insekticida Pantakana i Lindana na *Bacillus thuringiensis*. Proc. Suzbijanje gubara, Zagreb, 25–27.
- ŠARIĆ, A., 1965: Virusne bolesti breskve. Bilj. Zaštita 5–6, 94–96.
- ŠARIĆ, A., 1965: Virusne bolesti trešnje i višnje. Bilj. Zštita 5–6, 109–111.
- ŠARIĆ, A., 1966: Proširenost nekih vrsta rđa u šumskim rasadnicima. Šum. List 11–12, 516–519.
- ŠARIĆ, A., 1966: Studies in virus diseases of sweet cherry. I. Detection of a dual virus infection. Rev. Roum. Biol. Bot. 11, 191–196.
- ŠARIĆ, A., 1967: Proučavanje jednog soja *Bacillus thuringiensis* Berliner izolovanog iz gubara (*Limantria dispar* L.). Zašt. Bilja 96/97, 337–342.
- ŠARIĆ, A., 1967: Zaraze s latentnim virusima u nekim sortama jabuke. Poljopr. Znan. Smotra 26. 3–12.
- ŠARIĆ, A., 1969: Izolacija i morfologija bakteriofaga specifičnog za *Bacillus thuringiensis* Berliner. Proc. 1. Congr. Microb. Yugoslavia, Beograd, 745–748.
- ŠARIĆ, A., 1969: Mikoplazme kao uzročnici biljnih bolesti. Zašt. Bilja 105, 245–248.
- PANJAN, M., ŠARIĆ, A., WRISCHER, M. 1970: *Mycoplasma*-ähnliche Gebilde in Tomatenpflanzen nach Infektion mit Kartoffelgelbsucht. Phytopath. Z. 69, 31–35.
- ŠARIĆ, A., 1971: The occurrence of sowbane mosaic virus in sour cherry (SoMV). An. Phytopathol. 3, 155–158.
- ŠARIĆ, A., 1972: Natürliches Vorkommen von carnation mottle virus in *Chenopodium quinoa*. Willd. Acta Bot. Croat. 31, 9–14.
- ŠARIĆ, A., CVJETKOVIĆ, B., BUTURAC, I., 1972: Primjena serološkog testa u istraživanju virusa išaranosti karanfila. Agron. glasnik. 9/10, 581–590.
- ŠARIĆ, A., WRISCHER, M., 1972: Ultrastrukturne promjene u biljkama zaraženim virusom infektivne degeneracije loze. Mikrobiologija 9, 197–200.
- ŠARIĆ, A., VRDOLJAK, M., 1973: Preliminary report on a virus isolate from grapevine. Riv. Pat. Veg. 4, 263–265.
- ŠARIĆ, A., WRISCHER, M., 1973: Izolacija i karakterizacija faga bakterije *Bacillus thuringiensis*. Acta. Bot. Croat. 32, 43–47.
- LAMBERTI, F., BLEVE-ZACCHE, T., ŠARIĆ, A., INSERRA, R. 1973: Contribution to the knowledge of nematodes of Adriatic islands. I. Longidoridae on Vis, Biševo, Budikovac and Korčula. Nematol. Meditterr. 1, 115–118.
- BUTURAC, I., ŠARIĆ, A., LJUBEŠIĆ, N., 1974: Nalaz virusa mozaika celera u Jugoslaviji. Acta Bot. Croat. 33, 37–44.
- ŠARIĆ, A., 1975: Rasprostranjenost virusnih bolesti vinove loze u srednjoj Dalmaciji. Proc. JAZU Symp. Nat. Sci., Hvar, 101–103.
- ŠARIĆ, A., WRISCHER, M., 1975: Fine structure changes in different host plants induced by grapevine fanleaf virus. Phytopathol. Z. 84, 97–104.

- LAMBERTI, F., CERIE, M., ŠARIĆ, A., 1976: Contribution to the knowledge of nematodes of Adriatic islands. II. Longidoridae on Hvar. *Nematol. Mediterr.* 4, 244–248.
- ŠARIĆ, A., JURETIĆ, N., 1976: Natural hosts of sowbane mosaic virus in Yugoslavia. *Plant Virology, Proc. 8. Conf. Czechoslovak Plant Virologists, Bratislava*, 411–415.
- ŠARIĆ, A., 1977: Viroze voćaka važne za rasadničarsku proizvodnju s osobitim osvrtom na šarku šljive. *Bilj. Zaštita* 1, 56–57.
- ŠARIĆ, A., 1977: Neke mikoplazmoze voćaka i vinove loze. *Bilj. Zaštita* 6, 253–257.
- ŠARIĆ, A., 1977: Izvještaj o istraživanju virusa u kopriviću – *Celtis australis* L. *Hortikultura* 2–3, 115–118.
- ŠARIĆ, A., HRANUELI, T., 1977: Istraživanje virusnih bolesti loze u SR Hrvatskoj. *Proc. Symp. Ekskoriosis in vine, Mostar*, 149–151.
- ŠARIĆ, A., WRISCHER, M., 1977: Effect of lettuce mosaic virus on plant cells. *Phytopath. Z.* 90, 27–30.
- ŠARIĆ, A., 1980: Biochemical identification of viruses found in grape-vine in Yugoslavia. USDA project E30-Cr-126. Technical Report, 1 – 31.
- ŠARIĆ, A., VELAGIĆ, Z., 1980: Viruses and virus-like diseases of Maraska sour cherry (*Cerasus acida* ssp. *maraska*). *Acta Phyto. Ac. Sci. Hung.* 94, 367–369.
- ANSEMI, N., ŠARIĆ, A., CELLERINO, G. P., 1980: Su alcune alterazioni dei rami e foglie di *Celtis australis*. *Informatore fitopat.* 10, 11–17.
- VRDOLJAK, M., ŠARIĆ, A., 1981: Electrophoretic investigation of some grapevine fanleaf virus isolates. *Acta Bot. Croat.* 40, 51–60.
- BIBLINSKI, H., ŠARIĆ, A., 1981: Manganese in soil and plants. *Poljopr. Znan. Smotra* 55, 215–226.
- VRDOLJAK, M., ŠARIĆ, A., 1981: Electrophoretic investigation of some grapevine fanleaf virus isolates. *Acta Bot. Croat.* 40, 51–60.
- GATIN, Ž., ŠARIĆ, A., 1983: Indexing and increase method of »clean« and true-to-type apple and pear stock. *Canada Acta Hort.* 130, 83–85.
- ZAMOLA, B., ŠARIĆ, A., KARMINSKI-ZAMOLA, G., SIDOR, Č., 1983: Aeration provoked formation of bacteriophage in cultures of *Bacillus thuringiensis* (Berliner). *Eur. J. Appl. Microbiol. Biotechnol.* 17, 103–106.
- ZAMOLA, B., VALLES, P., ŠARIĆ, A., KUBOVIĆ, M., SIDOR, Č., MICCOLI, P., 1983: *Bacillus thuringiensis* – an insecticidal microorganism with perspective. *Process Biochem.* 1/2, 5–9.
- ŠARIĆ, A., ŠTEFANAC, Z., WRISCHER, M., 1984: Two rare types of particle aggregates in infections caused by a Yugoslav isolate of broad bean wilt virus (BBWV). *Phytopath. Mediterr.* 23, 88–90.
- ŠARIĆ, A., 1984: O nekim virozama krumpira. *Poljoprivredne Aktualnosti* 4–5, 839–841.
- ŠARIĆ, A., IVANEK, M., 1985: Zdravstvena selekcija u proizvodnji zdravog sadnog materijala. *Jugoslav. Vinogradarstvo Vinarstvo* 9, 4–6.
- DULIĆ, I., ŠARIĆ, A., KOLBER, M., VITALE, L.J., ŠIMAGA, Š., 1985: Primjena biotin-avidin imunoenzimskog testa u dijagnozi virusa šarke. *Proc. Abstracts 5. Congr. Microbiol. Yugosl.*, Poreč, 197.

- ŠARIĆ, A., CVJETKOVIĆ, B., 1985: Nalaz mikoplazmama sličnih organizama u jabuci sa simptomima proliferacija i kruški sa simptomima propadanja. Poljopr. Znan. Smotra 61–67.
- ZAMOLA, B., ŠARIĆ, A., SIDOR, Č., 1985: *Bacillus thuringiensis*: mikroorganizam upotrebljiv protiv štetnika. Kemija Ind. 34, 623–629.
- ŠARIĆ, A., NÉMETH, M., KÖLBER, M., BUŠIĆ, Z., 1986: Viruses associated with sour cherry decline. Acta Hort. 193, 43–48.
- DULIĆ, I., ŠARIĆ, A., 1986: Outbreak of plum pox virus on peach in Yugoslavia. Acta Hort. 193, 161–165.
- ŠARIĆ, A., 1986: Bakterijska nekroza loze. Glasn. Zašt. Bilja 12, 420–430.
- ŠARIĆ, A., 1986: Žuta patuljavost ječma, opasna viroza žitarica. Glasn. Zašt. Bilja, 6, 217–219.
- ŠARIĆ, A., 1987: Recenzija knjige: M. Nemeth (1986): Virus, mycoplasma and rickettsia diseases of fruit trees. Poljopr. Znan. Smotra 74, 383–384.
- ŠARIĆ, A., ŠTEFANAC, Z., 1988: The incidence and variation of Cucumber mosaic virus in four vegetable species in Croatia. Acta Bot. Croat. 47, 7–13.
- ŠKORIĆ, D., ŠARIĆ, A., VIBIO, M., MURARI, E., KRAJAČIĆ, M., BERTACCINI, A. 1988: Molecular identification and seasonal monitoring of phytoplasmas infecting Croatian grapevines. Vitis 37, 171–175.
- ŠARIĆ, A., DULIĆ, I., 1990: Nalaz i serološka identifikacija Citrus tristeza virusa u kultivarima citrusa u dolini Neretve. Poljopr. Znan. smotra 55, 171–176.
- ŠARIĆ, A., KOROŠEĆ-KORUZA, Z., 1991: Occurrence and spread of viruses associated with grapevine leaf roll and stem pitting in the north-western part of Yugoslavia. Proc. 10. Meeting of International council for study of viruses and virus diseases of grapevine, Volos, 416.
- ŠARIĆ, A., 1991: Izolat virusa mozaika crnokice iz vrste *Vigna unguiculata* (L.) Walp. iz Dalmacije. Acta Bot. Croat. 50, 135–138.
- ŠARIĆ, A., 1994: Prof.dr. Josip Kišpatić – In memoriam. Acta Bot. Croat. 53, 181–182.
- ŠKORIĆ, D., KRAJAČIĆ, M., BARBAROSSA, L., CILLO, F., GRIECO, F., ŠARIĆ, A., GALLITELLI, D., 1996: Occurrence of cucumber mosaic Cucumovirus with satellite RNA in lethal necrosis affected tomatoes in Croatia. J. Phytopath. 144, 543–549.
- ŠARIĆ, A., ŠKORIĆ, D., BERTACCINI, A., VIBIO, M., MURARI, E., 1997: Molecular detection of phytoplasmas infecting grapevines in Slovenia and Croatia. Proc. 12. Meeting ICVG, Lisabon, 77–78.
- ŠKORIĆ, D., KRAJAČIĆ, M., ŠARIĆ, A., 1997: Tomato spotted wilt Tospovirus isolated from pepper plants in Dalmatia. Petria 7, 47–50.
- ŠERUGA, M., ČURKOVIĆ PERICA, M., ŠKORIĆ, D., KOZINA, B., MIROŠEVIĆ, N., ŠARIĆ, A., BERTACCINI, A., KRAJAČIĆ, M., 2000: Geographic distribution of Bois Noir phytoplasmas infecting grapevines in Croatia. J. Phytopath. 148, 239–242.