

# Deividas Valiūnas

## CONTACT INFORMATION

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## EDUCATION AND ACADEMIC DEGREE

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- 2003 **Ph.D.**, Biomedical Sciences, Biology, Institute of Botany and Vilnius University, externally.  
Emphases: Phytopathology, Molecular Biology, Phylogeny, Bioinformatics.  
Dissertation (PhD thesis): ‘Identification of phytoplasmas in Lithuania and estimation of their biodiversity and molecular evolutionary relationships’.
- 1997 – 1999 **Master’s degree (MSc)**, Biology, Vilnius Pedagogical University, Faculty of Natural Sciences, Vilnius, Lithuania, **1999**. Gymnasium teacher qualification (biology).  
Emphases: Virology, molecular biology.  
Master Thesis: Identification of Tomato ringspot virus, its biological properties and distribution in ornamental plants, Institute of Botany and Vilnius Pedagogical University.
- 1992 – 1997 **Bachelor's degree (BSc)**, Biology and Chemistry, Vilnius Pedagogical University, Faculty of Natural Sciences, Vilnius, Lithuania, Secondary school biology and chemistry teacher qualification. State exams: biology, chemistry, psychology and pedagogy.

## PROFESSIONAL EXPERIENCE

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- 2017 06 – until now **Senior Researcher**  
Nature Research Centre, since 2017 07 01 Laboratory of Plant Pathology
- 2012 06 – 2017 06 **Chief Researcher**  
Nature Research Centre, Phytovirus Laboratory
- 2011 04 – 2011 07 **Scientific Secretary**  
Nature Research Centre
- 2007 06 – 2012 06 **Senior Researcher**  
Institute of Botany, Phytovirus Laboratory  
Since 2010 Jan Nature Research Centre
- 2004 01 – 2007 06 **Researcher**  
Institute of Botany, Phytovirus Laboratory
- 2000 01 – 2004 01 **Junior Researcher (assistant)**  
Institute of Botany, Phytovirus Laboratory
- 1997 08 – 2000 01 **Technician**  
Institute of Botany, Phytovirus Laboratory

## INTERNSHIPS

Oct 2004 – Oct 2005

**Visiting Scientist**, United States Department of Agriculture-Agricultural Research Service (USDA-ARS), Molecular Plant Pathology Laboratory (MPPL), MD 20705, Beltsville, USA

Jan 2001 – May 2001

**Visiting Scientist**, United States Department of Agriculture-Agricultural Research Service (USDA-ARS), Molecular Plant Pathology Laboratory (MPPL), MD 20705, Beltsville, USA

## RESEARCH INTERESTS

Identification and classification of phytoplasmas, assessment of their biodiversity and molecular evolutionary relationships based on 16S rDNA and other genetic markers. Investigation of phytoplasmal diseases and insect vectors; investigation of plant endophytic bacterial microbiomes. Experience in genome libraries data and NGS technology-based data analysis. Methodology. DNA, RNA, and plasmid DNA extraction; polymerase chain reaction (PCR), RT-PCR, restriction fragments length polymorphism (RFLP) analysis; DNA electrophoresis (agarose, polyacrylamide, Puls Field); molecular cloning techniques and sequence analysis. Bioinformatics tools. LaserGene DNASTAR software (putative restriction site analysis, sequence alignment, primer designing etc.); phylogenetic analysis (ClustalX, TreeView, MegaX softwares); pDraw, iPhyClassifier softwares; sequence analysis using NCBI GeneBank database; Keywords. Phytoplasmas, classification, phylogeny, marker genes, plant diseases, phytoplasma vectors, control of diseases, bacteria of class *Mollicutes*, plant viruses.

## PUBLICATIONS

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*Scientific articles published in journals (books), indexed in „Clarivate Analytics Web of Science“ database (with citation index):*

1. Ivanauskas A., **Valiunas D.**, Rimsaite J., Danilov J., Sneideris D., Zizyte-Eidetiene M., Wei W. 2022. New genetically distinct phytoplasmas and insect carriers associated with pine tree disease revealed by a survey in Curonian Spit, Lithuania. Canadian Journal of Forest Research, **52(2)**: 201-208. **Q2** <https://doi.org/10.1139/cjfr-2021-0152>
2. Marcone C.. **Valiunas D.**, Mondal S., Sundararaj R. 2021. On some significant phytoplasma diseases of forest trees: an update. Forests, **12**: 408. ISSN 1999-4907, IF: 3.282 (2019). **Q1** <https://doi.org/10.3390/f12040408>
3. Sneideris, D., Ivanauskas, A., Zizyte, M. **Valiunas D.** 2021. secA gene suitability for fast and easy identification of Phytoplasmas by RFLP analysis. European Journal of Plant Pathology, **160(3)**: 737-743. Electronic ISSN 1573-8469; Print ISSN 0929-1873, IF: 1.582 (2019) **Q2** <https://doi.org/10.1007/s10658-021-02262-3>
4. **Valiunas D.**, Jomantiene R., IvanauskasA., Sneideris D., Zizyte-Eidetiene M., Shao J., Zhao Y., Costanzo S., Davis R. E. 2019. Rapid detection and identification of ‘Candidatus Phytoplasma pini’-related strains based on genomic markers present in 16S rRNA and tuf genes. Forest Pathology, **94(6)**: e12553. <https://doi.org/10.1111/efp.12553> Online ISSN:1439-0329. **Q3**, IF 1.434
5. **Valiunas D.**, Ivanauskas A., Urbanaviciene L., Sneideris D., Kricenaite J., Jomantiene R. 2017. First report of a new disease of cucumber in Lithuania: molecular genetic characterization of the associated phytoplasma and identification of a possible insect vector, *Stenocranus minutus*. Plant Disease, **101(2)**: 379. <http://dx.doi.org/10.1094/PDIS-09-16-1318-PDN> ISSN: 0191-2917. IF 3.192. **Q1**.

6. Ivanauskas A., Urbonaite I., Jomantiene R., **Valiunas D.**, Davis R.E., 2016. First report of ‘*Candidatus Phytoplasma asteris*’ subgroup 16SrI-A associated with a disease of potato (*Solanum tuberosum*) in Lithuania. *Plant Disease*, **100(1)**::207. <http://dx.doi.org/10.1094/PDIS-05-15-0575-PDN>. ISSN: 0191-2917. IF 3.192. **Q1**.
7. **Valiunas D.**, Jomantiene R., Ivanauskas A., Urbonaite I., Sneideris D., Davis R.E. 2015: Molecular identification of phytoplasmas infecting diseased pine trees in the UNESCO-protected Curonian Spit of Lithuania. *Forests*, **6(7)**: 2469-2483; doi:10.3390/f6072469. ISSN 1999-4907. IF: 1.583. **Q2**.
8. Ivanauskas A., **Valiūnas D.**, Jomantienė R., Picciau L., Davis R.E. 2014: Possible insect vectors of ‘*Candidatus Phytoplasma asteris*’ and ‘*Ca. Phytoplasma pruni*’-related strains in Lithuania. *Zemdirbyste-Agriculture*, **101(3)**: 313–320. DOI 10.13080/z-a.2014.101.040. ISSN 1392-3196. IF 0,420. **Q3**.
9. **Valiunas D.**, Jomantiene R., Davis R.E. 2013: Evaluation of the DNA-dependent RNA polymerase β-subunit gene (*rpoB*) for phytoplasma classification and phylogeny. *International Journal of Systematic and Evolutionary Microbiology* **63(10)**:3904-3914; doi:10.1099/ijss.0.051912-0. IF 2.798. **Q2**.
10. Ivanauskas A., **Valiunas D.**, Jomantiene R., Staniulis J., Alma A., Picciau L., Davis R. E. 2011: First report of potential phytoplasma vectors: *Euscelis incisus* and *Macrosteles sexnotatus* in Lithuania. - *Bulletin of Insectology* **64(S)**: S131-S132, ISSN 1721-8861. IF 0,592. **Q3**. <http://www.bulletinofinsectology.org/contents/insectology64-supplement-2011.htm>
11. Jomantiene R., **Valiunas D.**, Ivanauskas A., Urbanaviciene L., Staniulis J., Davis R. E. 2011: Larch is a new host for a group 16SrI, subgroup B phytoplasma in Ukraine. *Bulletin of Insectology* **64(S)**: S101-S102, ISSN 1721-8861. IF 0,592. **Q3**.
12. Jomantiene R., Davis R. E., Lee I.-M., Zhao Y., Bottner-Parker, K., **Valiunas D.**, Petkauskaitė R. 2010: Onion is host for two phytoplasma lineages, subgroups 16SrI-A and 16SrI-(B/L)L, in Lithuania. A *HinfI* site revealed a SNP marking divergent branches of evolution. *Journal of Plant Pathology*. **92(2)**: 461-470. ISSN: 1125-4653. IF 1,054. **Q3**.
13. **Valiunas D.**, Jomantiene R., Ivanauskas A., Abraitis R., Staniene G., Zhao Y., Davis R. E., 2009: First report of a new phytoplasma subgroup, 16SrIII-T, associated with decline disease affecting sweet and sour cherry trees in Lithuania. *Plant Disease*, **93(5)**: 550. ISSN: 0191-2917. IF 2,121. **Q2**.
14. **Valiunas D.**, Jomantiene R., Davis R. E., 2009: Establishment of a new phytoplasma subgroup, 16SrI-Q, to accomodate a previously undescribed phytoplasma found in diseased cherry in Lithuania. – *Journal of Plant Pathology*, **91(1)**: 71-75. ISSN: 1125-4653. IF 0,974. **Q3**.
15. **Valiūnas D.**, Jomantienė R., Davis R. E. 2007: Phytoplasmas detected in cultivated fruit plants in Lithuania. - *Bulletin of Insectology*, **60 (2)**: 139-140. ISSN 1721-8861. IF 0,381. **Q4**.
16. Samuitienė M., Jomantienė R., **Valiūnas D.**, Navalinskienė M., Davis R. E. 2007: Phytoplasma strains detected in ornamental plants in Lithuania. - *Bulletin of Insectology*, **60 (2)**: 137-138. ISSN 1721-8861. IF 0,381. **Q4**.
17. Urbanavičienė L., Jomantienė R., **Valiūnas D.**, Davis R. E. 2007: Molecular identification of 16SrI-A, 16SrI-B, 16SrI-C, and 16SrI-L subgroups of phytoplasmas in gramineous plants in Lithuania. - *Bulletin of Insectology*, **60 (2)**: 127-128. ISSN 1721-8861. IF 0,381. **Q4**.
18. **Valiunas D.**, Samuitiene M., Rasomavicius V., Navalinskiene M., Staniulis J., Davis R. E., 2007: Subgroup 16SrIII-F phytoplasma strains in an invasive plant, *Heracleum sosnowskyi*, and an ornamental, *Dictamnus albus*. *Journal of Plant Pathology*, **89(1)**: 137-140. ISSN: 1125-4653. IF 0,974. **Q3**.
19. **Valiunas D.**, Staniulis J., Davis R. E., 2006: ‘*Candidatus Phytoplasma fragariae*’, a novel phytoplasma taxon discovered in yellows diseased strawberry, *Fragaria x ananassa*. - *International Journal of Systematic and Evolutionary Microbiology*, **56(1)**: 277-281. ISSN: 1466-5026. (Online ISSN: 1466-5034). IF 2,662. **Q2**. DOI 10.1099/ijss.0.63935-0.

20. Valiunas D., Alminaitė A., Jomantiene R., Davis R. E. Maas, J. L., 2004: Possible cause of European blueberry disease is related to North American milkweed yellows phytoplasma. - Journal of Plant Pathology, **86(2)**: 135-140. ISSN: 1125-4653. IF 0,586. Q3.
21. Kuisiene N., Jomantiene R., Valiunas D., Chitavichius D., 2002: Characterization of thermophilic proteolytic spore-forming bacteria from a geothermal site in Lithuania based on 16S rDNA RFLP and ITS-PCR analyses – (From Russian Mikrobiologija, **71(6)**: 824-828. ISSN 0026-3656) Microbiology, **71(6)**: 712-716. ISSN: 0026-2617.. IF 0,515. <https://link.springer.com/content/pdf/10.1023/A:1021440208887.pdf> Q4.
22. Jomantiene R., Davis R. E., Valiunas D., Alminaitė A., 2002: New group 16SrIII phytoplasma lineages in Lithuania exhibit rRNR interoperator sequence heterogeneity. - European Journal of Plant Pathology, **108(6)**: 507-517. ISSN: 0929-1873. IF 1,475.
23. Jomantiene R., Davis R. E., Alminaitė A., Valiunas D., Jasinskaite R., 2002: First report of oat as host of a phytoplasma belonging to group 16SrI, subgroup A. - Plant Disease, **86(4)**: 443. ISSN: 0191-2917. IF 1,429.
24. Alminaitė, A., Davis R.E., Valiunas D., Jomantiene R., 2002: First report of a group 16SrI, subgroup B, phytoplasma in diseased *Epilobium hirsutum* in the region of Tallin, Estonia. - Plant Disease, **86(10)**: 1177. ISSN: 0191-2917. IF 1,429.
25. Valiunas D., Alminaitė A., Staniulis J., Jomantiene R., Davis R.E., 2001: First report of aster yellows-related subgroup I-A phytoplasma strains in carrot, phlox, sea-lavender, *Aconitum*, and hyacinth in Lithuania. - Plant Disease, **85(7)**: 804. ISSN: 0191-2917. IF 1,163.
26. Valiunas D., Alminaitė A., Staniulis J., Jomantiene R., Davis R.E., 2001: First report of alder yellows phytoplasma in the Eastern Baltic Region. - Plant Disease, **85(10)**: 1120. ISSN: 0191-2917. IF 1,163.

**Scientific articles published in conference proceedings, indexed in „Clarivate Analytics Web of Science“ database:**

1. Valiunas D., Jomantiene R., Staniulis J., Davis R.E. 2005. Evidence for a New Phytoplasma Taxon in Diseased Strawberry, <i>Fragaria x ananassa</i>. Phytopathology, **95(6)**: S160. IF 2,049.
2. Jomantiene R., Davis R. E., Valiunas D., 2005: Phylogenetic relationships of phytoplasmas inferred from analysis of DNA-directed RNA polymerase beta subunit, RpoB. – Phytopathology, **95(6)**: S169. ISSN: 0031-949X. IF 2,049.
3. Valiunas D., Jomantiene R., Davis R. E., 2005: A 'Candidatus Phytoplasma asteris'-related phytoplasma associated with cherry little leaf disease represents a new subgroup, 16SrI-Q. – Phytopathology, **95(6)**: S106. ISSN: 0031-949X. IF 2,049.
4. Valiunas D., Alminaitė A., Davis E. R., Staniulis J., Jomantiene R., 2001. Group 16SrV phytoplasma in diseased alder trees (*Alnus glutinosa*) in Lithuania. Phytopathology, **91(6)** S91. ISSN: 0031-949X. IF 2,126.
5. Jomantiene R., Valiunas D., Davis R. E., Staniulis J., 2000. Clover phyllody and *cirsium* yellows phytoplasmas: strain diversity or species divergence?. - Phytopathology, **90(6)** S39. ISSN: 0031-949X. IF 2,145.

**Scientific articles published in journals (books), indexed in „Clarivate Analytics Web of Science“ database (without citation index):**

1. Cicenas J., Kalyan K., Sorokinė A., Jatulytė A., Valiunas D., Kaupinis A., Valius M. 2014: Highlights of the Latest Advances in the Research on the CDK Inhibitors. Cancers, Special Issue "Kinases and Cancer", **6(4)**, 2224-2242; doi:10.3390/cancers6042224. ISSN 2072-6694.
2. Stanienė G., Stanyš V., Vinskienė J., Abraitis R., Jomantienė R., Valiūnas D., Abraitienė A. 2009: Fitoplazmomis ir viroidais infekuotos trešnės (*Prunus avium* L.) *in vitro* kultūra (*In vitro*

- culture of phytoplasma- and viroid- infected sweet cherry (*Prunus avium* L.)). – Zemdirbystė-Agriculture, **96(3)**: 129-140. ISSN 1392-3196. Trejų metų IF 0,232 (2008-2010 m.).
3. Urbanavičienė L., Valiūnas D., Jomantienė R., 2008: Molecular identification of agents causing yellows diseases in oats (*Avena sativa* L.). Zemdirbyste-Agriculture, **95(3)**: 286–292. ISSN: 1392-3196. Trejų metų IF 0,232 (2008-2010 m.).
  4. Valiūnas D., Jomantiene R., Davis R.E., Sindaraviciene I., Alminaitė A., Staniulis J., 2000: Molecular detection and characterization of phytoplasmas infecting vegetables, legumes, and ornamental plants in Lithuania. - In: Development of environmentally friendly plant protection in the Baltic region; Proceedings of the International Conference; Tartu, Estonia, September 28-29, Transactions of the Estonian Agricultural University. Tartu University Press, **209**: 220-223. ISBN 9985-882-77-6. ISSN 1406-4049.

#### ***Books' chapters published by significant recognized press***

1. Marcone C., Valiūnas D., Salehi M., Mondal S., Sundararaj R. 2023. Phytoplasma diseases of trees (Chapter 4). In.: Asiegbu F.O., Kovalchuk A. (eds). Forest microbiology: tree diseases and pests. Vol. 3. London : Academic Press, January 2023, Elsevier. ISBN 9780443186943. p. 99-120. <https://doi.org/10.1016/B978-0-443-18694-3.00008-0>
2. Carmine Marcone, Deividas Valiūnas, Soma Mondal and Ramachandran Sundararaj. 2021. On Some Significant Phytoplasma Diseases of Forest Trees: An Update. In.: Salvatore Moricca and Tiziana Panzavolta (eds). Forest Pathology and Entomology. MDPI, 1052 Basel, Switzerland. Reprinted from: Forests 2021, 12, 408, doi:10.3390/f12040408, pp. 295-314. ISBN 978-3-0365-2659-1 (Hbk), ISBN 978-3-0365-2658-4 (PDF). <https://doi.org/10.3390/books978-3-0365-2658-4>; <https://www.mdpi.com/books/pdfview/book/4776>
3. de Oliveira E., Valiūnas D., Jović J., Bedendo I. P., Urbanavičienė L., de Oliveira C. M. 2018. Occurrence and Epidemiological Aspects of Phytoplasmas in Cereals (Chapter 3). In: Rao G. P., Bertaccini A., Fiore N., Liefting L. W. (eds), Phytoplasmas: Plant Pathogenic Bacteria - I. Characterisation and Epidemiology of Phytoplasma - Associated Diseases. The First edition. Springer Nature, Singapore Pte Ltd., pp. 67-89. ISBN 978-981-13-0118-6 ISBN 978-981-13-0119-3 (eBook). [https://doi.org/10.1007/978-981-13-0119-3\\_3](https://doi.org/10.1007/978-981-13-0119-3_3)
4. Valiūnas D., Jomantiene R., Ivanauskas A., Sneideris D., Staniulis J., Davis R. E. 2010: A possible threat to the timber industry: ‘*Candidatus Phytoplasma pinii*’ in Scots pine (*Pinus sylvestris* L.) in Lithuania. Abstract book of the combined meeting of Work Groups 1-4, COST Action FA0807, Editors A. Bertaccini, A. Lavafia, E. Torres, Current status and perspectives of phytoplasma disease research and management, Sitges, Spain, February 1<sup>th</sup> and 2<sup>nd</sup>, 2010. IRTA, Page 38. ISBN-13: 978-84-692-98916
5. Valiūnas D., Jomantiene R., Davis R.E., Sindaraviciene I., Alminaitė A., Staniulis J., 2000: Molecular detection and characterization of phytoplasmas infecting vegetables, legumes, and ornamental plants in Lithuania. - In: Development of environmentally friendly plant protection in the Baltic region; Proceedings of the International Conference; Tartu, Estonia, September 28-29, Transactions of the Estonian Agricultural University. Metspalu, L.; Mitt, S. (eds). Tartu University Press, **209**: 220-223. ISBN 9985-882-77-6.

#### ***Other reviewed scientific publications (books, books' chapters, collections of articles, articles, textbooks and etc.):***

1. Ivanauskas A., Rimsaite J., Danilov J., Soderman G., Sneideris D., Zizyte-Eidetiene M., Wei W. Valiūnas D. A survey of potential insect vectors of mo untain pine proliferation decline phytoplasma in Curonian Spit, Lithuania. Published: 12 November 2020 by MDPI in The 1st International Electronic Conference on Forests — Forests for a Better Future: Sustainability,

Innovation, Interdisciplinarity, session Forest Genetics, Ecophysiology and Biology. Environmental Sciences Proceedings **2021**, 3(1), 81; ISSN: 2673-4931  
<https://doi.org/10.3390/IECF2020-07977>

2. Valiunas D., Samuitiene M., Navalinskiene M., Davis R. E., 2008: Identification of viral and phytoplasma agents causing diseases in *Gaillardia* Foug. plants in Lithuania. – Agronomy Research, **6(1)**: 109-118. ISSN 1406-894X.
3. Bogoutdinov D. Z., Valiunas D., Navalinskiene M., Samuitienė M., 2008: O vidovoj identifikacii vozбудитељ fitoplazmov paslennyh. – Sel'skohoz. Biologija, ISSN 0131–6397, **1**: 77–80. , ISSN: 0131–6397.
4. Urbanavičienė L., Valiūnas D., Jomantienė R. 2006: Detection of aster yellows group (subgroup 16SrI-B) phytoplasma in oats based on nested PCR and RFLP in Lithuania. – Agronomy Research, **4(special issue)**: 417-420. ISSN 1406-894X.
5. Urbanavičienė L., Valiūnas D., Jomantienė R., 2005: Molecular detection and identification of subgroup 16SrI-L phytoplasma in ryegrass (*Lolium multiflorum*). – Phytopathologia Polonica, **35**: 121-124. ISSN:1230-0462. [http://www.up.poznan.pl/~ptfit1/pdf/PP35/PP\\_35\\_16.pdf](http://www.up.poznan.pl/~ptfit1/pdf/PP35/PP_35_16.pdf)

#### **Reviewed scientific articles, published in Lithuania:**

1. Jomantienė R., Valiūnas D., Kalvelytė A., Alminaite A.. 2019. *In memoriam DR ROBERT EDWARD DAVIS*. Botanica, 25(2): 202–207. ISSN 2538-8657. <https://doi.org/10.2478/botlit-2019-0021>
2. Žižytė-Eidetienė M., Valiūnas D., 2018. IN MEMORIAM JUOZAS BENEDIKTAS STANIULIS (1938–2018). Botanica., 24(1): 101-112. ISSN 2538-8657. <https://doi.org/10.2478/botlit-2018-0010>
3. Jomantienė R., Ivanauskas A., Valiūnas D., Urbanavičienė L., Šneideris D. 2016. Epidemics of group 16SrI-A phytoplasmas in a garden of Vilnius region in Lithuania. Botanica Lithuanica., 22(1): 16–22. ISSN 2029-932X. <https://doi.org/10.1515/botlit-2016-0002>
4. Ivanauskas A., Valiūnas D., Ivinskis P., Rimšaitė J. 2014: Some data on Cicadomorpha and Fulgoromorpha (Insecta, Hemiptera) of Lithuania. New and Rare for Lithuania Insect Species, **26**: 26-30.
5. Valiūnas D., Urbanavičienė L., Jomantienė R., Davis R.E. 2007: Molecular detection, classification, and phylogenetic analysis of subgroup 16SrI-C phytoplasmas detected in diseased *Poa* and *Festuca* in Lithuania. – Biologija, **53(2)**: 36-39. ISSN 1392-0146.
6. Urbanavičienė L., Jomantienė R., Valiūnas D., Jaciunskas K., 2007: Varpinius augalus pažeidžiančių fitoplazmų identifikavimas ir klasifikacija. – Lietuvos biologinė įvairovė (būklė, struktūra, apsauga), VPU, **2**: 112-118. ISSN 1822-2781.
7. Urbanavičienė L., Valiūnas D. 2006: Identification of aster yellows group (subgroup 16SrI-C) phytoplasma in *Festuca arundinacea* Schreb. based on PCR and RFLP methods. - Botanica Lithuanica, **12(2)**: 121-125. ISSN 1392-1665.
8. Urbanavičienė L., Jomantienė R., Valiūnas D., Davis R. E., 2004: Molecular detection of phytoplasmas in oats, barley, and *Triticosecale* and their classification based on 16S rRNA gene polymorphisms. – Žemės ūkio mokslai, **3**: 15-19. ISSN 1392-0200.
9. Valiūnas D., Jomantienė R., Davis R. E., 2004: Identification of subgroup 16SrI-B phytoplasma from naturally infected pear in Lithuania. - Sodininkystė ir daržininkystė, mokslo darbai. **23(4)**: 29-36. ISSN 0236-4212.
10. Samuitienė M., Zitikaitė I., Navalinskiene M., Valiūnas D., 2003: Identification of *tomato ringspot nepovirus* by RT-PCR. – Biologija, **4**: 39-42. ISSN 1392-0146.
11. Valiūnas D., Jomantienė R., 2003: Identification of subgroup 16SrI-M phytoplasma from naturally infected garden onion. – Sodininkystė ir daržininkystė, mokslo darbai, **22(3)**: 235-242. ISSN 0236-4212.
12. Valiūnas D., 2003: Identification of phytoplasmas in Lithuania and estimation of their biodiversity and molecular evolutionary relationships. – Botanica Lithuanica, **9(3)**: 305-306. ISSN 1392-1665.
13. Alminaitė A., Valiūnas D., Navalinskiene M., Staniulis J., Jomantiene R., 2001: *Hyacinthus orientalis* is the host for a new phytoplasma, exhibiting ribosomal interoperon sequence heterogeneity. – Biologija, **4**: 37-39. ISSN 1392-0146.

## PARTICIPATION IN INTERNATIONAL AND NATIONAL SCIENTIFIC PROGRAMMES AND PROJECTS

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2013 – 2015	<b>Principal investigator</b> The Research Council of Lithuania support, Groups of scientist's project, Reg. Nr. MIP-13287, „Molecular identification of conifer pathogens from UNESCO-protected Curonian Spit“, contract Number: MIP-51/2013, amount of support 341 000 LTL (98 760 Euro).
2011 – 2012	<b>Primary implementer</b> The Research Council of Lithuania support, Groups of scientist's project, MIP-11070, Characterization of phospholipases as potential factors of phytoplasma pathogenicity, contract Number. MIP-062/2011, head dr. Rasa Jomantienė, amount of support 180 000 LTL.
2009 - 2013	<b>The second representative of Lithuania COST Action Management Committee</b> COST Action FA0807, ,Integrated Management of Phytoplasma Epidemics in Different Crop Systems. International action. <b>Support: Science and Technology Agency (2009 support 9000 LTL, contract number NR.31V-216 (dr. D. Valiūnas))</b> ; from 2010 Science Council of Lithuania coordinates COST Actions.
2007 - 2009	<b>Primary implementer</b> N-07010; N-15/2007-2009. Project on Development of the Industrial Biotechnology in Lithuania 2007-2010; ‘Detection and Elimination of Viroids and Phytoplasmas from Horticultural Crops Used in Industrial Biotechnology’. 180 000 LTL. Lithuanian State Science and Studies Foundation.
2006	<b>Principal investigator</b> T-51/06, Groups of scientists project: ,Molecular investigation of viruses and phytoplasmas associated with cultivated plants of <i>Poaceae</i> family’, 30 000 LTL. Supported by Lithuanian State Science and Studies Foundation.
2002 - 2004	<b>Primary implementer</b> K-057, „Diversity and phylogenetic relationships of <i>Mollicutes</i> and thermophilic <i>Bacillus</i> “, 173 700 LTL. Lithuanian State Science and Studies Foundation.
2001 - 2003	<b>Primary implementer</b> K-036. „ <i>Specific ecological niches microorganisms diversity, communication, and evaluation of the potential of biotechnology</i> “, Head dr. Alė Kučinskienė, Institute of Botany Hydrobotany Laboratory, 180 000 LTL. Lithuanian State Science and Studies Foundation.

## TRAINING

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2001	Chemical Waste Management Training Course – USDA-ARS, Beltsville, USA
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## PARTICIPATION IN SCIENTIFIC CONFERENCES

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### International scientific conferences:

1. Ivanauskas A., Rimsaite J., Danilov J., Soderman G., Sneideris D., Zizyte-Eidetiene M., Wei W. **Valiunas D.** A survey of potential insect vectors of mo untain pine proliferation decline phytoplasma in Curonian Spit, Lithuania. Published: 12 November 2020 by MDPI in The 1st International Electronic Conference on Forests — Forests for a Better Future: Sustainability, Innovation, Interdisciplinarity, session Forest Genetics, Ecophysiology and Biology.

Environmental Sciences Proceedings 2021, 3(1), 81; ISSN: 2673-4931  
<https://doi.org/10.3390/IECF2020-07977>  
<https://sciforum.net/manuscripts/7977/manuscript.pdf;> Presentation slides  
<https://sciforum.net/manuscripts/7977/slides.pdf>

2. Valiunas, D. Jomantiene, R. Ivanauskas, A., Urbonaite, I., Davis, R. E. Molecular identification of pine tree-infecting phytoplasmas from the UNESCO-protected Curonian Spit in Lithuania. In Joint IUFRO Working Party Meetings, Swedish University of Agricultural Sciences, Uppsala, Sweden, 7-12 June, 2015, Page 89. Poster presentation.  
<http://www.iufro.org/science/divisions/division-7/70000/70200/70202/activities>
3. Ivanauskas A., Valiunas D., Jomantiene R., Staniulis J., Alma A., Picciau L., Davis R. E. 2011: First report of potential phytoplasma vectors: *Euscelis incisus* and *Macrosteles sexnotatus* in Lithuania. - *Second International Phytoplasmatologist Working Group Meeting*. Neustadt/Weinstrasse, Germany, 12-16 September 2011. Oral presentation.  
[http://www.ipwgnet.org/index.php?option=com\\_content&view=article&id=38&Itemid=33](http://www.ipwgnet.org/index.php?option=com_content&view=article&id=38&Itemid=33)
4. Jomantiene R., Valiunas D., Ivanauskas A., Urbanaviciene L., Staniulis J., Davis R. E. 2011: Larch is a new host for a group 16SrI, subgroup B phytoplasma in Ukraine. *Second International Phytoplasmatologist Working Group Meeting*. Neustadt/Weinstrasse, Germany, 12-16 September 2011.
5. D. Valiunas, R. Jomantiene, A. Ivanauskas, D. Sneideris, J. Staniulis, R.E. Davis. 2010: A possible threat to the timber industry: ‘*Candidatus Phytoplasma pini*’ in Scots pine (*Pinus sylvestris* L.) in Lithuania. Abstract book of the combined meeting of Work Groups 1-4, COST Action FA0807, Editors A. Bertaccini, A. Lavafia, E. Torres, Current status and perspectives of phytoplasma disease research and management, Sitges, Spain, February 1<sup>th</sup> and 2<sup>nd</sup>, 2010. Page 38. ISBN-13: 978-84-692-98916 Oral presentation.  
<http://www.costphytoplasma.ipwgnet.org/PDF%20files/Talks%20Sitges/VALIUNAS%20WG1%20cost%20PINUS%202010.pdf>  
[http://www.ipwgnet.org/index.php?option=com\\_content&view=article&id=38&Itemid=33](http://www.ipwgnet.org/index.php?option=com_content&view=article&id=38&Itemid=33)
6. Valiunas D., Jomantiene R., Staniulis J., Davis R. E., 2009: 16SrI-B phytoplasma infections in plum and in sour cherry in Lithuania. 21st International Conference on Virus and Other Graft Transmissible of Fruit Crops. July 5 – 10, 2009, Neustadt, Germany. Abstract. P 81. ISSN 1866-590X. Poster presentation.
7. Valiūnas D., Jomantienė R., Davis R. E., 2007. Phytoplasmas detected in cultivated fruit plants in Lithuania. <http://www.phytoplasma-vector.com/meeting.htm> *First International Phytoplasmatologist Working Group Meeting*, Bologna, Italy, 12-15 November 2007. Poster and oral presentation.
8. Samuitienė M., Jomantienė R., Valiūnas D., Navalinskienė M., Davis R. E., 2007: Phytoplasma strains detected in ornamental plants in Lithuania. <http://www.phytoplasma-vector.com/meeting.htm> *First International Phytoplasmatologist Working Group Meeting*, Bologna, Italy, 12-15 November 2007.
9. Urbanavičienė L., Jomantienė R., Valiūnas D., Davis R. E. 2007: Molecular identification of 16SrI-A, 16SrI-B, 16SrI-C, and 16SrI-L subgroups of phytoplasmas in gramineous plants in Lithuania. <http://www.phytoplasma-vector.com/meeting.htm> *First International Phytoplasmatologist Working Group Meeting*, Bologna, Italy, 12-15 November 2007.
10. Urbanavičienė L., Valiūnas D., Jomantienė R. 2006: Detection of aster yellows group (subgroup 16SrI-B) phytoplasma in oats based on nested PCR and RFLP in Lithuania. – International conference, Development of environmentally friendly plant protection, Puhajarve, Estonia, 5-7-09-2006, Programme and Abstracts, p. 51. Poster presentation (participated D. Valiunas).
11. Bogoutdinov D. Z., Valiunas D., Navalinskiene M., Samuitiene M., 2005: K etiologii fitoplazm佐v paslienovych v Rosii. – V kn. „Vtoroj vserosijskij s'ezd po zashchite rastenij. S.-P., 5-10 dekabria 2005. Fitosanitarnoe ozdorovlenie ekosistem“. – Materialy s'ezda, tom I, s. 140-143.

12. **Valiunas D.**, Jomantiene R., Davis R. E., 2005: A '*Candidatus Phytoplasma asteris*'-related phytoplasma associated with cherry little leaf disease represents a new subgroup, 16SrI-Q. – 2005 APS Annual Meeting July 30 – August 3 Austin, Texas, USA, Poster presentation.
13. Urbanavičienė L. Jomantienė R., **Valiūnas D.**, Davis R. E., 2005: Molecular identification of phytoplasmas occurring in gramineous plants in Lithuania (Varpiniuose augaluose paplitusių fitoplazmų molekulinis identifikavimas Lietuvoje). – XIII pasaulio lietuvių mokslo ir kūrybos simpoziumas, Tezių rinkinys, Vilnius, 2005 m. birželio 30 d. – liepos 4 d., p. 137. ISBN 9955-9789-0-2.
14. **Valiunas D.**, Jomantiene R., Staniulis J., Davis R. E., 2005: Evidence for a New Phytoplasma Taxon in Diseased Strawberry, *Fragaria x ananassa*. American Phytopathological Society, Potomac Division, Ocean City, MD, USA, March 16<sup>th</sup> – 18<sup>th</sup>, 2005, Publication no. P-2005-0037-PTA, On line, <http://www.filebox.vt.edu/users/abaudoin/potomac/2005OceanCityArchive.htm> <http://www.apsnet.org/members/div/potomac/pdfs/2005FinalMtgProgram.pdf> Oral presentation.
15. Jomantiene R., Davis R. E., **Valiunas D.**, 2004: Phylogenetic relationships of phytoplasmas inferred from analysis of DNA-directed RNA polymerase beta subunit, RpoB. –APS 2004 Northeastern Division Meeting Abstracts, October 6-8, 2004 – State College, Pennsylvania. Online <http://www.apsnet.org/meetings/div/ne04abs.asp>
16. Urbanavičienė L., Jomantienė R., **Valiūnas D.**, 2004: Molecular detection and identification of subgroup 16SrI-L phytoplasma in ryegrass (*Lolium* L.). - Improvement and unification of plant disease diagnostics, August 30th – September 1st, 2004, Research Institute of Pomology and Floriculture, Skierniewice, Poland, Book of Abstracts, p. 61. Poster presentation (participated D. Valiunas).
17. **Valiūnas D.**, Jomantienė R., 2003: Identification of subgroup 16SrI-M phytoplasma from naturally infected garden onion. Scientific works of the Lithuanian Institute of Horticulture and Lithuanian University of Agriculture. Horticulture and vegetable growing, Progress of plant protection in current horticulture: theoretical and applied aspects 2003 09 10-12, Babtai, Lithuanian Institute of Horticulture, Sodininkystė ir daržininkystė, mokslo darbai, **22(3)**: 235-242. ISSN 0236-4212, Poster presentation.
18. Jomantiene R., Davis R. E., Alminaitė A., Staniulis J., **Valiunas D.**, 2002: Ribosomal RNA interoperator sequence heterogeneity in new phytoplasma lineages infecting oak, campion, thistle, and dandelion. – American Phytopathological Society, Potomac Division Meeting Abstracts, March 4-6, 2002, Williamsburg, Virginia, posted online <http://www.apsnet.org/members/div/potomac/pdfs/2002-abstracts.pdf>
19. **Valiunas D.**, Alminaitė A., Davis R. E., Maas J. L., Jomantiene R., 2002: Molecular evidence for the presence of a milkweed yellows-related phytoplasma in blueberry. - In.: Book of Abstracts. Disease Resistance in Plant Pathology. 6<sup>th</sup> Conference of European Foundation for Plant Pathology. – Prague, Czech Republic, 8-14 September 2002: 56. Poster presentation.
20. **Valiunas D.**, Alminaitė A., Davis E. R., Staniulis J., Jomantiene R., 2001 Group 16SrV phytoplasma in diseased alder trees (*Alnus glutinosa*) in Lithuania. –Abstract of Joint Meeting of APS, MSA, and SON, 2001 08 25-29, Salt Lake City, Utah, USA. Poster presentation.
21. **Valiunas D.**, Jomantiene R., Davis R.E., Sindaraviciene I., Alminaitė A., Staniulis J., 2000: Molecular detection and characterization of phytoplasmas infecting vegetables, legumes, and ornamental plants in Lithuania. - In: Development of environmentally friendly plant protection in the Baltic region; Proceedings of the International Conference; Tartu, Estonia, September 28-29, Transactions of the Estonian Agricultural University. Tartu University Press, **209**: 220-223. ISBN 9985-882-77-6. ISSN 1406-4049. Poster presentation.
22. Jomantiene R., Davis R. E., **Valiunas D.**, Staniulis J., 2000. Diversity and phylogenetic relationships of phytoplasmas affecting plants in Lithuania. In.: Book of Abstracts. Biodiversity in Plant Pathology. 5<sup>th</sup> Congress of the European Foundation for Plant Pathology: 49. – Taormina – Giardini Naxos, Italy. September 18

<http://poke.ijs.si/ResultPublicationDetails.aspx?ResultPublicationId=d795294e46e94189b9068b8be3ea1c16&SourceDatabaseId=9cc5f422c50f42eba55b8f82da45986f>

23. Jomantiene R., **Valiunas D.**, Davis R. E., and Staniulis J., 2000. Clover Phyllody and *Cirsium* Yellows Phytoplasmas: Strain Diversity or Species Divergence?. - Annual APS Meeting. USA.

#### National scientific conferences:

1. **Valiūnas D.**, Jomantienė R. 2010: COST veikla FA0807: Fitoplazmų epidemijų įvairose kultūrinių augalų sistemose integruotas tyrimas. COST informacinė diena – seminaras, Botanikos institutas, Vilnius, 2010-12-07. Oral presentation.
2. **Valiūnas D.**, Jomantienė R. 2009: COST veikla FA0807: Fitoplazmų epidemijų įvairose kultūrinių augalų sistemose integruotas tyrimas. COST informacinė diena – seminaras, Botanikos institutas, Vilnius, 2009-10-28. Oral presentation.
3. **Valiūnas D.**, 2009: Lietuvos soduose aptiktos fitoplazmos ir jų identifikavimas molekulinės biologijos metodais., Mokslinė konferencija: Augalai – žaliaava pramoninei biotechnologijai. Babtai, birželio 30 d., 2009. Oral presentation.
4. Urbanavičienė L., Jomantienė R., **Valiūnas D.**, Jaciunskas K., 2007: Varpinius augalus pažeidžiančių fitoplazmų identifikavimas ir klasifikacija. – Lietuvos biologinė įvairovė (būklė, struktūra, apsauga), VPU, 2: 112-118. Šalies mokslinė konferencija 2007 11 21. ISSN 1822-2781.
5. Urbanavičienė L., **Valiūnas D.** 2006: Astrų geltos grupės (16SrI-C pogrupio) fitoplazmos, pažeidžiančios *Festuca arundinacea* Schreb. augalus, identifikavimas PGR ir RFLP metodais. – Lietuvos biochemikų draugijos IX suvažiavimas-konferencija, Biochemija: mokslas ir žinių visuomenė, 2006-06-16-18 d., Tolieja (Molėtų raj.), Pranešimų tezės, Kaunas : Vytauto Didžiojo universitetas, 2006: 79-80. Poster presentation (participated D. Valiūnas).
6. Alminaitė A., **Valiūnas D.**, Jomantienė R., 2001: Naktižiedžių geltligės fitoplazmos identifikavimas ir paplitimas Lietuvoje. Identification and distribution of *Silene* yellows phytoplasma in Lithuania. – In.: Lietuvos jaunujų botanikų darbai. Trečiosios mokslinės konferencijos pranešimų tezės. Proceedings of the Lithuanian Young Botanists. Abstracts of the Third Scientific Conference: 49-50. – Vilnius, Botanikos instituto leidykla.
7. **Valiūnas D.**, Alminaitė A., Jomantienė R., Staniulis J., 2001: Medžių žudančios fitoplazmos. Tree injuring phytoplasmas. – In.: Lietuvos jaunujų botanikų darbai. Trečiosios mokslinės konferencijos pranešimų tezės. Proceedings of the Lithuanian Young Botanists. Abstracts of the Third Scientific Conference: 76-78. – Vilnius, Botanikos instituto leidykla. Oral presentation.
8. **Valiūnas D.**, 1999: Pomidorų žiediškosios dėmėtligės viruso identifikavimas ir paplitimas dekoratyviniuose augaluose. The identification of tomato ringspot virus and its distribution in ornamental plants. – In.: Lietuvos jaunujų botanikų darbai. Antrosios mokslinės konferencijos pranešimų tezės. Proceedings of the Lithuanian Young Botanists. Abstracts of the Second Scientific Conference: 1999. balandžio 27-28 d. 98-99. – Botanikos instituto leidykla, Vilnius. Oral presentation.

#### PARTICIPATION IN THE STUDY PROCESS

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##### *Supervision of PhD students:*

###### Natural Sciences (N000). Biology (N010)

Martynas Dėlkus Topic of PhD thesis: Molecular analysis and impact of unculturable phytoplasmas on endophytic bacterial microbiomes of infected berry plants 2021-10-01 - 2025-09-31

**Algirdas Ivanauskas** Topic of PhD thesis: ,Phytoplasma diseases and their vectors in Lithuania '. Defenced on June 17, 2014. 2009-10-01 – 2013 10

#### **Member of PhD thesis defense Doctoral Committee:**

Iglė Vepštaitė-Monstavičė 2021-12-10;  
Genovaitė Marija Žižytė 2010-06-22;  
Vilma Meškauskienė 2010-11-30;  
Sigitas Šulčius 2013-06-28.

**Member of the Doctoral Commission of the Science of Biology** of the Nature Research Centre, Vilnius, Lithuania 2013 – 2022 years.

#### **Supervision of bachelor and master students:**

Algirdas Ivanauskas (2007 and 2009 years), Raimonda Petkauskaitė (2009 and 2010 years), Jūratė Kričenaitė (2015-2016 years), Justina Lopataitė (2015-2016 years), Kristina Skiudulaitė (2016-2018 years), Martynas Dėlkus (2018-2021 years) etc.

#### **OTHERS**

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1. There was identified and described **a new** for science unculturable **phytoplasma species** '*Candidatus Phytoplasma fragariae*'  
<https://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?id=338604>
2. There were identified and described several **new** for science **16Sr phytoplasma subgroups** (see list of publications).
3. 2008 year State **scholarship (award)** of Lithuanian junior scientist. Lithuanian ministry of education and science.
4. **Sequences deposited** in the GenBank database (NCBI [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov))  
<https://www.ncbi.nlm.nih.gov/nuccore/?term=valiunas+d>
5. **Reviewed scientific articles** in journals:: Biologija, Botanica Lithuanica, Journal of Phytopathology, International Journal of Biodiversity and Conservation, Plant Disease, Žemdirbystė-Agriculture, European Journal of Plant Pathology, Australasian Plant Pathology, International Journal of Systematic and Evolutionary Microbiology, Phytopathologia Mediterranea, Forest Pathology, Plant Health Progress, Canadian Journal of Plant Pathology, TROPICAL Plant Pathology ir t.t. <https://publons.com/researcher/2908079/deividas-valiunas/> and <https://orcid.org/0000-0001-7625-3766>
6. **Senior editor** of journal Australasian Plant Pathology <https://www.springer.com/journal/13313> – 2013 year.
7. **Guest editor** of Forests journal <https://www.mdpi.com/journal/forests> Special Issue "Biology, Diagnosis and Management of Forest Phytoplasmas": [https://www.mdpi.com/journal/forests/special\\_issues/Forest\\_Phyltoplasmas](https://www.mdpi.com/journal/forests/special_issues/Forest_Phyltoplasmas) 2022-2023 m.

#### **Publications for general public in Lithuanian:**

8. Indrė Urbanaitė, **Deividas Valiūnas**, Algirdas Ivanauskas, Rasa Jomantienė 2014-07. Fitoplazma – klasinga Kuršių nerijos pušų kenkėja. Mūsų girios. 2014-07: P. 16-17. <https://musu-girios.lt/wp-content/uploads/2022/09/MG-2014-07.pdf>
9. Indrė Urbanaitė, **Deividas Valiūnas**, Algirdas Ivanauskas, Rasa Jomantienė 2012-12-05. Galime netekti tokios Kuršių nerijos, kokią esame ipratę matyti. - Vakarų ekspresas. Internetas. <http://www.ve.lt/naujienos/lietuva/vakaru-lietuva/galime-netekti-tokios-kursiu-nerijos-kokia-esame-iprati-matyti-859563>