

## CURRICULUM VITAE

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Date of birth : 13 January 1971

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### Studies

1. **1988-1993, BSc**, Aristotle University of Thessaloniki (AUTH), School of Agriculture, Faculty of Crop Production [**Excellent, 8.73/10.00**].
2. **1996-2000, PhD** in 'Plant Ecology', Aristotle University of Thessaloniki (AUTH), School of Agriculture, [**Excellent**].

### Academic honours

1. **1989-1993**, scholar of State Scholarship Foundation for undergraduate studies (**1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> years of study**) due to high records.
2. **1996-2000**, scholar of State Scholarship Foundation for Ph.D. thesis elaboration.
3. **1997-1999**, scholar of AUTH Legacy Bureau, (K. Lazarides legacy) for PhD thesis elaboration. Scholarship is given due to high undergraduate record.

### Pedagogic training

**1999-2000**, post-graduate training in pedagogics, Higher School of Pedagogical & Technological Education of Thessaloniki [**Excellent, 9.00/10.00**].

### Trainings-Seminars

- **17-22 August 2000**, 3<sup>rd</sup> International Crop Science Congress (ICSC) "Meeting Future Human Needs", Hamburg, Germany participation in **Master Classes**:
  1. Turner, N. C. "Stress in Crops and Cropping Systems", 18<sup>th</sup> August.
  2. Connor, D. "Diversity in Agro-Ecosystems", 19<sup>th</sup> August.
  3. Janick, J. "Designing Crops and Cropping Systems for the Future", 21<sup>rd</sup> August.
  4. Cassman, K. G. "Facing the Growing Needs of Mankind", 22<sup>nd</sup> August.
- **10-14 June 2002**, training mission of Hellenic Sugar Industry SA at SES EUROPE NV/SA, Tienen, Belgium and Belgian Institute of Sugar Beet Research (IRBAB/KBIVB), regarding sugar beet seed production.
- **6-16 April 2009**, Research Associate Program at International Cotton Advisory Committee entitled "Sustainable Cotton Production" taken place at Washington DC, New York, North and South Carolina.

### Work experience

- **September 1993-June 1994**, AUTH Research Committee as agriculturist-researcher in research program entitled "Radioecology of Seminatural Ecosystems" and funded by CEC Radiation Protection Program of the Commission of the European Community.

- **October 1997-February 2004**, external teacher, Technological Educational Institute of Western Macedonia, Branch of Florina, Department of Crop Production.
- **April 1998- September 1998**, AUTH Research Committee as agriculturist-researcher in research program entitled "Species competition and coexistence in acidic grasslands of Northern Greece" and funded by General Secretariat of Research and Technology.
- **October 1998-January 1999**, National Agriculture Research Foundation (NAGREF)-Agricultural Research Center of Macedonia & Thrace as agriculturist.
- **9 July 2001-21 June 2007**, Head of the Department of Experimentation, Hellenic Sugar Industry SA, Larissa & Plati factories.
- **April 2002-February 2005**, external teacher, Technological Educational Institute of Larissa, Department of Crop Production.
- **2003-2004**, lecturer, University of Thessaly, Department of Biochemistry & Biotechnology.
- **2004-2005**, lecturer, University of Thessaly, Department of Agriculture, Crop Production & Rural Environment.
- **2007-2008**, associated professor, University of Thessaly, Department of Agriculture, Crop Production & Rural Environment.
- **22 June 2007-8 August 2010**, associated researcher, Cotton & Industrial Plants Institute-NAGREF.
- **9 August 2010-3 February 2011**, associated researcher, Cereal Institute-NAGREF.
- **4 February 2011-today**, Lab. of Agronomy, School of Agriculture, AUTH (Professor since August 2023).
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### Teaching experience

#### *Aristotle University of Thessaloniki (AUTH)*

##### *Undergraduate level*

1. 2014-today: Teaching and practice on " **Cereals-Legumes**" (N501Y) and "**Industrial Plants**" (N520E).
2. 2015-today: students' supervision of summer practice (N700Y)
3. 2011-2014: Co-teaching and practice on "**Field Crops I-Cereals-Legumes**" (N501Y) and "**Field Crops II-Industrial Plants**" (N520E).
4. 2011-2015: Summer practice on **Cereals-Legumes** and **Industrial Plants** to students of the fourth year of studies.
5. 2003 & 2004, invited speaker, delivered a 2-hour lecture entitled "*Sugar beet machine harvesting*" in the context of "**Field Crops II-Industrial Plants**" course.

##### *Postgraduate level*

1. 2011-2018: Co-teaching of "**Applied Field Physiology**" (BAZN708) and "**Integrated Crop Production**" (BAZN715) courses.
2. 2018-today: Co-teaching of "**Plant and Crop Physiology**" (AKA803E) and "**Integrated Crop Production and Climate Change**" (AKA823E) courses.
3. 2007-2008 & 2008-2009, invited speaker, delivered a 2-hour lecture entitled "*Physiology of sucrose storage in sugar beet roots*" in the context of "**Applied Field Physiology**" course.

#### *University of Thessaly (UTH)*

##### *Undergraduate level*

1. 2003-2004, invited speaker, delivered two lectures (6 hours in total) entitled "**Sugar beet crop**" in the context of "**Field Crops II-Industrial Plants**" course, *Department of Agriculture, Crop Production & Rural Environment*.
2. 2003-2004, **Lecturer**, teaching and practice on "**Plant Physiology**", *Department of Biochemistry & Biotechnology*.
3. 2004-2005, **Lecturer**, Co-teaching and practice on "**Field Crops I-Cereals-Legumes**" and "**Field Crops II-Industrial Plants**", *Department of Agriculture, Crop Production & Rural Environment*.
4. 2007-2008, **Assistant Professor**, practice on "**Plant Physiology**", *Department of Agriculture, Crop Production & Rural Environment*.

#### *Postgraduate level*

1. 2002-2003 & 2003-2004, invited speaker, delivered a 2-hour lecture entitled "**Sugar beet Crop**" in the context of "**Special Issues on Field Crops and Energy Plants**" course.
2. 2004-2005, invited speaker, delivered a 2-hour lecture per topic "**Sugar beet Research Priorities at Local and Global Level**" "**Agronomic Factors Affecting Sugar beet Root Quality**" and in the context of "**Special Issues on Field Crops and Energy Plants**" course.
3. 2007-2008 & 2006-2007, invited speaker, delivered a 3-hour lecture entitled "**Use of Stable Carbon and Nitrogen Isotopes in Physiological and Agronomic Research**" in the context of "**Advances Plant Physiology**" course.

#### *Democritus University of Thrace (DUTH)*

##### *Postgraduate level*

1. 2007-2008, invited speaker, delivered a 3-hour lecture entitled "**Use of Stable Carbon Isotopes in Breeding of C<sub>3</sub> Crops with Emphasis on Cereals**" in the context of "**Sustainable Management of Genetic Resources**" course.

#### *Technological Education Institutes (TEI)*

1. October 1997–February 2004, teaching personnel, *Department of Plant Production and Department of Marketing & Quality Control of Agricultural Products*, Branch of Florina, TEI of Western Macedonia.
2. April 2002-February 2005, teaching personnel, *Department of Plant Production* TEI of Larissa.

#### *University of Thessaly*

1. Member of the **steering committee** in **one (1)** PhD and **three (3)** MSc theses (all completed).

#### **Use of scientific instruments and devices**

1. As Head of Department of Experimentation-Hellenic Sugar Industry SA/Larissa factory organized and equipped the **Field Crop Physiology Laboratory εργαστήριο** with:
  - **portable gas exchange system** LCi, (ADC BioScientific Ltd, Hoddesdon, UK),
  - **image analysis system** WinDias, (Delta-T Devices Ltd, Cambridge, UK),
  - **canopy analysis system** SunScan, (Delta-T Devices Ltd, Cambridge, UK),
  - **water potential measurement system** WP 4, (Decagon Devices, Pullman, USA),
  - **nondestructive chlorophyll estimation instrument** SPAD-502, (Minolta Co Ltd, Osaka, Japan),

- **Infrared thermometer** (HI 99551 Hanna Instruments Inc, Woonsocket, Rhode Island, USA).
- 2. As Assistant Researcher in Cotton & Industrial Plants Institute became familiar with the use of:
  - **pressure chamber** for leaf water potential measurements (PMS model 610, PMS Instrument Co., Corvallis, Oregon, USA),
  - **portable gas exchange system** *LCpro+*, (ADC BioScientific Ltd, Hoddesdon, UK).

### **Research programs-research experience**

1. **"Single-plant resource use efficiency and the investigation of the appropriate mycorrhizal inocula to boost grain productivity of corn genotypes". Coordinator for AUTH**, 27 June 2018-27 June 2021, funded by Partnership Agreement 2014-2020.
2. **"Field trials of indigenous bacteria strains to assess their inoculation efficacy in soybean". Coordinator**, 15 May 2016-31 January 2017, funded by PIONEER HI-BRED HELLAS SA.
3. **"Effectiveness of soybean inoculation with commercial and domestic strains of rhizobia". Coordinator**, 16 June 2015-31 January 2016 and **member of the research team**, 15 May 2014-31 January 2016, funded by PIONEER HI-BRED HELLAS SA.
4. **"Evaluation of annual *Datura* genotypes as a potential source of alkaloids and oil for biodiesel production". Coordinator**, 5 April 2013-4 April 2014, funded by Research Committee of AUTH.
5. **"Ag-Celence: effects of pyraclostrobin on sunflower physiology, yield, quality and disease control". Coordinator**, 20 February 2012-31 December 2012 and 4 April 2013-31 December 2013, funded by BASF Hellas.
6. **"Use of N-Tester for studying the impact of N fertilization on physiological and agronomic traits of upland cotton". Member of the research team**, 17 June 2011-17 November 2011, funded by YARA HELLAS SA.
7. **"Surveying and solving problems related with agronomic practice of oilseed crops in central Macedonia". Member of the research team**, 1 November 2011-31 October 2012, funded by FytoEnergeia SA.
8. **"Ag-Celence: effects of pyraclostrobin on durum wheat physiology, yield, quality and disease control". Member of the research team**, 20 December 2010-31 July 2011 and 14 February 2012-31 December 2012, funded by BASF Hellas.
9. **Assistant Researcher**, National Agricultural Research Foundation-Cotton & Industrial Plants Institute, worked on **field evaluation of upland cotton accessions for yield and quality as related with physiological traits and potassium (K) effects**.
10. **Head of the Department of Experimentation**, Hellenic Sugar Industry, Larissa factory responsible to direct the research programs and applied projects, which related with **field evaluation of sugar beet cultivars and varieties, N fertilization effects on sugar beet yield and quality, seasonal growth of sugar beets as related with climatic conditions, abiotic factors and cultivar variation related with sugar beet re-growth, genotypic evaluation of sweet sorghum, oilseed rape, safflower, sunflower and winter wheat, sugar beet applied fertilization recommendations based on soil analyses, monitoring in-season N nutrition of sugar beets using petiole NO<sub>3</sub>-N assessments**.
11. **"Selection for yield and study of carbon isotope discrimination-yield relationships in common bean (*Phaseolus vulgaris* L.) under absence of**

**competition". Member of the research team**, funded by TEI of Western Macedonia (2006-2008).

12. **"Studying the relationships between leaf carbon isotope discrimination and ash content with quantitative traits to exploit intracultivar variation in upland cotton". Member of the research team**, 1 December 2004-31 December 2006, Democritus University of Thrace, Department of Rural Development, was funded by **General Secretariat of Research and Technology** in the context of "PYTHAGORAS II" research program.
13. **"Development-use of selection tools and evaluation of sugar beet genetic material under thermal and drought stress". Expertised researcher**, 1 July 2001-30 June 2003, Hellenic Sugar Industry SA-Genetic Development & Biotechnology Service, was funded by **General Secretariat of Research and Technology** in the context of "PAVET 00" research program.
14. **Selection for yield and study of carbon isotope discrimination-yield relationships in bread wheat (*Triticum aestivum* L.) under absence of competition". Member of the research team**, October 1998-July 2002 funded by TEI of Western Macedonia.

#### **Other activities**

1. **Member of the Technical Committee on Genetic Material**, Ministry of Rural Development & Food (2010).
2. **External evaluator of research proposals** submitted for funding in **General Secretariat of Research and Technology** in the context of "SYNERGASIA" research program (2010).
3. **External evaluator of a research proposals** submitted for funding in **ARIMNet2** in the context of FP7 (EU), August 2015.

#### **Synopsis of published works**

**89 papers in indexed journals (SCI)**

**15 papers in international journals after reviewing**

**3 papers in national journals after reviewing**

**12 papers in proceedings of international congresses**

**2 abstract in proceedings of international congresses**

**28 papers in proceedings of national congresses**

**12 abstracts in proceedings of national congresses**

**1 book (in Greek)**

#### **Citations**

**1300 citations by others in SCI journals**

#### **Reviewer in international journals**

- Acta Agriculturae Scandinavica, Section B-Plant Soil Science
- Acta Physiologiae Plantarum
- Advances in Crop Sciences and Technology
- African Journal of Agricultural Research
- Agricultural and Food Science
- Agronomy Journal
- American Journal of Plant Sciences
- Annals of Applied Biology
- Archives of Agronomy and Soil Science
- Australian Journal of Crop Science

- Biochemical Systematics and Ecology
- Computers and Electronics in Agriculture
- Crop and Pasture Science
- Crop Protection
- Crop, Forage and Turfgrass Management
- Environment, Development and Sustainability
- Environmental and Experimental Botany
- Environmental Processes
- Environmental Science and Pollution Research
- Euphytica
- Experimental Agriculture
- Fresenius Environmental Bulletin
- HortScience
- International Journal of Biometeorology
- International Journal of Plant Production
- ISRN Agronomy
- Journal of Agricultural Science and Technology
- Journal of Agronomy
- Journal of Agronomy and Crop Science
- Journal of Biological Research-Thessaloniki
- Journal of Environmental Management
- Journal of Forestry Research
- Journal of Herbs, Spices & Medicinal Plants
- Journal of Sugar Beet Research
- Journal of Vegetation Science
- Pakistan Journal of Biological Sciences
- Pakistan Journal of Botany
- Pedobiologia
- Photosynthetica
- Plant and Soil
- Plant Disease Note
- Plant Ecology
- Research Journal of Environmental Sciences
- Saudi Journal of Biological Sciences
- Scientia Agricola
- Scientia Horticulturae
- Spanish Journal of Agricultural Research
- Sugar Tech
- World Journal of Agricultural Sciences

## **Publications**

### **Papers in indexed journals**

1. Veresoglou, D.S., **J.T. Tsialtas**, N. Barbayiannis and G.C. Zalidis. **1995**. Caesium and strontium uptake by two pasture plant species grown in organic and inorganic soils. *Agriculture, Ecosystems & Environment* **56:37-42**.
2. **Tsialtas, J.T.**, L.L. Handley, M. Kassioumi, D.S. Veresoglou and A.A. Gagianas. **2001**. Interspecific variation in potential water-use efficiency and its relation to plant species abundance in a water-limited grassland. *Functional Ecology* **15:605-614**.

3. **Tsialtas, J.T.**, I. Tokatlidis, E. Tamoutsidis and I. Xynias. **2001**. Grain carbon isotope discrimination and ash content of bread wheat individual plants of cv. Nestos selected for high and low yield in absence of competition. *Cereal Research Communications* **29:391-396**.
4. **Tsialtas, J.T.**, M. Kassioumi and D.S. Veresoglou. **2002**. Evaluating leaf ash content and potassium concentration as surrogates of carbon isotope discrimination in grassland species. *Journal of Agronomy and Crop Science* **189:168-175**.
5. **Tsialtas, J.T.**, M. Kassioumi and D.S. Veresoglou. **2002**. Leaf construction cost of the most abundant species in an upland grassland area of northern Greece. *Russian Journal of Plant Physiology* **49:360-363**.
6. **Tsialtas, J.T.**, T. Matsi, N. Barbayiannis, A. Sdrakas and D.S. Veresoglou. **2003**. Strontium absorption by two *Trifolium* species as influenced by soil characteristics and liming. *Water, Air and Soil Pollution* **144:363-373**.
7. **Tsialtas, J.T.** and D.A. Karadimos. **2003**. Leaf carbon isotope discrimination and its relation with root qualitative traits and harvest index in sugar beet (*Beta vulgaris* L.). *Journal of Agronomy and Crop Science* **189:286-290**.
8. Tokatlidis, I.S., **J.T. Tsialtas**, I.N. Xynias, E. Tamoutsidis and M. Irakli. **2004**. Variation within a bread wheat cultivar for grain yield, protein content, carbon isotope discrimination and ash content. *Field Crops Research* **86:33-42**.
9. **Tsialtas, J.T.**, M.T. Kassioumi and D.S. Veresoglou. **2004**. Seasonal changes of N<sub>2</sub>-fixation by *Trifolium repens* in an upland Mediterranean grassland. *European Journal of Agronomy* **21:335-346**.
10. **Tsialtas, J.T.**, T.S. Pritsa and D.S. Veresoglou. **2004**. Leaf physiological traits and their importance for species success in a Mediterranean grassland. *Photosynthetica* **42:371-376**.
11. **Tsialtas, J.T.**, M.T. Kassioumi and D.S. Veresoglou. **2005**. Effects of competition and N and P supply on carbon isotope discrimination and <sup>15</sup>N-natural abundance in four grassland species. *Biologia Plantarum* **49:133-136**.
12. **Tsialtas, J.T.** and N. Maslaris. **2005**. Effect of N fertilization rate on sugar yield and non-sugar impurities of sugar beets (*Beta vulgaris*) grown under Mediterranean conditions. *Journal of Agronomy and Crop Science* **191:330-339**.
13. **Tsialtas, J.T.** and N. Maslaris. **2005**. Leaf area estimation in a sugar beet cultivar by linear models. *Photosynthetica* **43:477-479**.
14. **Tsialtas, J.T.**, I.S. Tokatlidis, E. Tamoutsidis and I. Xynias. **2005**. Relationship of grain yield with carbon isotope discrimination and ash content in lines derived from a bread wheat cultivar. *Journal of Agricultural Science* **143:275-282**.
15. Tokatlidis, I.S., I.N. Xynias, **J.T. Tsialtas** and I.I. Papadopoulos. **2006**. Single-plant selection at ultra-low density to improve stability of a bread wheat cultivar. *Crop Science* **46:90-97**.
16. **Tsialtas, J.T.** and N. Maslaris. **2006**. Leaf carbon isotope discrimination relationships to element content in soil, roots and leaves of sugar beets grown under Mediterranean conditions. *Field Crops Research* **99:125-135**.
17. **Tsialtas, J.T.** and N. Maslaris. **2007**. Leaf shape and its relationship with Leaf Area Index in a sugar beet (*Beta vulgaris* L.) cultivar. *Photosynthetica* **45:527-532**.
18. **Tsialtas, J.T.** and N. Maslaris. **2008**. Leaf area prediction model for sugar beet (*Beta vulgaris* L.) cultivars. *Photosynthetica* **46:291-293**.
19. **Tsialtas, J.T.** and N. Maslaris. **2008**. Evaluation of a leaf area prediction model proposed for sunflower. *Photosynthetica* **46:294-297**.

20. **Tsialtas, J.T.**, I.S. Tokatlidis, C. Tsikrikoni and A.S. Lithourgidis. 2008. Leaf carbon isotope discrimination, ash content and K relationships with seedcotton yield and lint quality in lines of *Gossypium hirsutum* L. ***Field Crops Research* 107:70-77.**
21. Tokatlidis, I.S., C. Tsikrikoni, **J.T. Tsialtas**, A.S. Lithourgidis and P.J. Bebeli. 2008. Variability within cotton cultivars for yield, fibre quality and physiological traits. ***Journal of Agricultural Science* 146:483-490.**
22. **Tsialtas, J.T.** and N. Maslaris. 2008. Nitrogen fertilization effects on leaf morphology and evaluation of leaf area and LAI prediction models in sugar beet. ***Photosynthetica* 46:346-350.**
23. **Tsialtas, J.T.** and N. Maslaris. 2008. Leaf allometry and prediction of specific leaf area (SLA) in a sugar beet (*Beta vulgaris* L.) cultivar. ***Photosynthetica* 46:351-355.**
24. Koundouras, S., **J.T. Tsialtas**, E. Zioziou and N. Nikolaou. 2008. Rootstock effects on the adaptive strategies of grapevine (*Vitis vinifera* L. cv Cabernet-Sauvignon) under contrasting water status: physiological and anatomical responses. ***Agriculture, Ecosystems & Environment* 128:86-96.**
25. **Tsialtas, J.T.**, S. Koundouras and E. Zioziou. 2008. Leaf area estimation by simple measurements and evaluation of leaf area prediction models in 'Cabernet-Sauvignon' grapevine leaves. ***Photosynthetica* 46:452-456.**
26. **Tsialtas, J.T.** and N. Maslaris. 2008. Sugar beet response to N fertilization as assessed by late season chlorophyll and Leaf Area Index measurements in a semi-arid environment. ***International Journal of Plant Production* 2:57-70.**
27. **Tsialtas, J.T.** and N. Maslaris. 2008. Seasonal trends and relationships of light, temperature and leaf physiological traits of sugar beets grown under semi-arid, Mediterranean conditions. ***International Journal of Plant Production* 2:223-242.**
28. Tziros, G.T., G.A. Bardas, **J.T. Tsialtas** and G.S. Karaoglanidis. 2008. First report of oilseed rape stem rot caused by *Sclerotinia sclerotiorum* in Greece. ***Plant Disease* 92:1473.**
29. Samaras, V., C.D. Tsadilas and **J.T. Tsialtas**. 2009. Use of treated wastewater as fertilization and irrigation amendment in pot-grown processing tomatoes. ***Journal of Plant Nutrition* 32:741-754.**
30. **Tsialtas, J.T.** and N. Maslaris. 2009. Selective absorption of K over Na in sugar beet cultivars and its relationship with yield and quality in two contrasting environments of central Greece. ***Journal of Agronomy and Crop Science* 195: 384-392.**
31. **Tsialtas, J.T.**, E. Soulioti, N. Maslaris and D. Papakosta. 2009. Genotypic response to re-growth of defoliated sugar beets after re-watering in a water-limited environment: effects on yield and quality. ***International Journal of Plant Production* 3:1-18.**
32. Maliogka, V.I., **J.T. Tsialtas**, A. Papantoniou, K. Efthimiou and N.I. Katis. 2009. First report of a phytoplasma associated with an oilseed rape disease in Greece. ***Plant Pathology* 58:792.**
33. Koundouras, S., E. Hatzidimitriou, M. Karamolegkou, E. Dimopoulou, S. Kallithraka, **J.T. Tsialtas**, E. Zioziou, N. Nikolaou and Y. Kotseridis. 2009. Irrigation and rootstock effects on the phenolic concentration and aroma potential of *Vitis vinifera* L. cv Cabernet Sauvignon grapes. ***Journal of Agricultural and Food Chemistry* 57:7805-7813.**
34. **Tsialtas, J.T.**, T. Matsi and N. Maslaris. 2010. Plasticity of leaf anatomy, chemistry and water economy of irrigated sugar beets grown under Mediterranean conditions. ***International Journal of Plant Production* 4:99-114.**



35. Maslaris, N., **J.T. Tsialtas** and T. Ouzounidis. **2010**. Soil factors affecting yield, quality, and response to nitrogen of sugar beets grown on light-textured soils in northern Greece. *Communications in Soil Science and Plant Analysis* **41**:1551-1564.
36. **Tsialtas, J.T.** and N. Maslaris. **2010**. Sugar beet root shape and its relation with yield and quality. *Sugar Tech* **12**:47-52.
37. Tokatlidis, I.S., C. Tsirikoni, A.S. Lithourgidis, **J.T. Tsialtas** and C. Tzantarmas. **2011**. Intra-cultivar variation in cotton: response to single-plant yield selection at low density. *Journal of Agricultural Science* **149**:197-204.
38. **Tsialtas, J.T.**, I.I. Papadopoulos, E.G. Tamoutsidis and I.S. Tokatlidis. **2011**. Relationships of grain carbon isotope discrimination ( $\Delta$ ) and ash content with yield and quality in dry bean. *Journal of Agricultural Science* **149**:273-281.
39. **Tsialtas, J.T.**, E. Soulioti, N. Maslaris and D. Papakosta. **2011**. Effect of defoliation on leaf physiology in sugar beet cultivars subjected to drought stress and re-watering. *International Journal of Plant Production* **5**:207-220.
40. Bakhshandeh, E., B. Kamkar and **J.T. Tsialtas**. **2011**. Application of linear models for estimation of leaf area in soybean (*Glycine max* (L.) Merr). *Photosynthetica* **49**:405-416.
41. **Tsialtas, J.T.** and I.G. Eleftherohorinos. **2011**. First report of branched broomrape (*Orobanche ramosa* L.) on oilseed rape (*Brassica napus* L.), wild mustard (*Sinapis arvensis* L.) and wild vetch (*Vicia* spp.) in northern Greece. *Plant Disease* **95**: 1322.
42. **Tsialtas, J.T.** and N. Maslaris. **2012**. Tracing nitrogen in soil-root-petiole-leaf continuum in sugar beets: Can SPAD-502 help? *Journal of Plant Nutrition* **35**:556-566.
43. **Tsialtas, J.T.** and N. Maslaris. **2012**. Leaf physiological traits and their relation with sugar beet cultivar success in two contrasting environments. *International Journal of Plant Production* **6**:15-36.
44. Lotos, L., **J.T. Tsialtas**, V.I. Maliogka, N. Kaloumenos, I.G. Eleftherohorinos and N.I. Katis. **2013**. First report of a "Candidatus Phytoplasma solani" related strain associated with a disease of *Datura stramonium* in Greece. *Journal of Plant Pathology* **95**:447.
45. Ninou, E., **J.T. Tsialtas**, C.A. Dordas and D.K. Papakosta. **2013**. Effect of irrigation on the relationships between leaf gas exchange related traits and yield in dwarf dry bean grown under Mediterranean conditions. *Agricultural Water Management* **116**:235-241.
46. **Tsialtas, J.T.**, V. Michelsen and D.S. Koveos. **2013**. First report of *Botanophila turcica* (Diptera: Anthomyiidae) on cultivated safflower *Carthamus tinctorius* L. in Greece. *Journal of Biological Research-Thessaloniki* **19**:80-82.
47. **Tsialtas, J.T.** and N. Maslaris. **2013**. Nitrogen effects on yield, quality and K/Na selectivity of sugar beets grown on clays under semi-arid, irrigated conditions. *International Journal of Plant Production* **7**:355-372.
48. Papantoniou, A.N., **J.T. Tsialtas** and D.K. Papakosta. **2013**. Dry matter and nitrogen partitioning and translocation in winter oilseed rape (*Brassica napus* L.) grown under rainfed Mediterranean conditions. *Crop and Pasture Science* **64**:115-122.
49. **Tsialtas, J.T.**, D. Baxevanos and N. Maslaris. **2014**. Chlorophyll meter readings, leaf area index, and their stability as assessments of yield and quality in sugar beet cultivars grown in two contrasting environments. *Crop Science* **54**:265-273.
50. **Tsialtas, J.T.** and N. Maslaris. **2014**. The effect of temperature, water input and length of growing season on sugar beet yield in five locations in Greece. *Journal of Agricultural Science* **152**:177-187.

51. **Tsialtas, I.T.,** E. Patelou, N.S. Kaloumenos, P.V. Mylona, A. Polidoros, G. Menexes and I.G. Eleftherohorinos. **2014.** In the wild hybridization of annual *Datura* species as unveiled by morphological and molecular comparisons. *Journal of Biological Research-Thessaloniki* **21:11.**
52. **Tsialtas, J.T.,** S. Shabala and T. Matsi. **2016.** A prominent role for leaf calcium as a yield and quality determinant in upland cotton (*Gossypium hirsutum* L.) varieties grown under irrigated Mediterranean conditions. *Journal of Agronomy and Crop Science* **202:161-173.**
53. Theologidou, G., **J.T. Tsialtas,** N. Kaloumenos and I.G. Eleftherohorinos. **2016.** From Petri dish to field: testing Greek lentil accessions for imazamox tolerance. *International Journal of Plant Production* **10:265-274.**
54. **Tsialtas, I.T.,** S. Shabala, D. Baxevanos and T. Matsi. **2016.** Effect of potassium fertilization on leaf physiology, fiber yield and quality in cotton (*Gossypium hirsutum* L.) under irrigated Mediterranean conditions. *Field Crops Research* **193:94-103.**
55. **Tsialtas, I.T.,** S. Shabala, D. Baxevanos and T. Matsi. **2017.** Cation selectivity in cotton (*Gossypium hirsutum* L.) grown on calcareous soil as affected by potassium fertilization, cultivar and growth stage. *Plant and Soil* **415:331-346.**
56. Baxevanos, D., E. Korpetis, M. Irakli and **I.T. Tsialtas.** **2017.** Evaluation of a durum wheat selection scheme under Mediterranean conditions: adjusting trial locations and replications. *Euphytica* **213:82.**
57. **Tsialtas, I.T.,** G.S. Theologidou and G.S. Karaoglanidis. **2017.** Effect of pyraclostrobin on disease control, leaf physiology, seed yield and quality of sunflower. *Crop Protection* **99:151-159.**
58. **Tsialtas, I.T.,** A.N. Papantoniou, T. Matsi and D.K. Papakosta. **2017.** Leaf gas exchange physiology and ion homeostasis of oilseed rape (*Brassica napus* L.) under Mediterranean conditions: associations with seed yield and quality. *Agriculture, Ecosystems & Environment* **247:225-235.**
59. Baxevanos, D., **I.T. Tsialtas,** D.N. Vlachostergios, I. Hadjigeorgiou, C. Dordas and A. Lithourgidis. **2017.** Cultivar competitiveness in pea-oat intercrops under Mediterranean conditions. *Field Crops Research* **214:94-103.**
60. Baxevanos, D., **J.T. Tsialtas,** D. Vlachostergios and C. Goulas. **2017.** Optimum replications and locations for cotton cultivar trials under Mediterranean conditions. *Journal of Agricultural Science* **155: 1553-1564.**
61. **Tsialtas, J.T.,** A.N. Papantoniou, D. Baxevanos, I.I. Papadopoulos, N. Karaivazoglou, N. Maslaris and D.K. Papakosta. **2017.** Determinants of yield and quality in winter rapeseed (*Brassica napus* L.) under Mediterranean conditions. *Journal of Agricultural Science* **155: 1577-1593.**
62. Irakli, M., **I.T. Tsialtas** and A. Lazaridou. **2018.** Determination of free and total underivatized amino acids including L-canavanine in bitter vetch seeds using Hydrophilic Interaction Liquid Chromatography. *Analytical Letters* **51: 2600-2611.**
63. **Tsialtas, J.T.,** E. Kostoglou, D. Lazari, and I.G. Eleftherohorinos. **2018.** Annual *Datura* accessions as source of alkaloids, oil and protein under Mediterranean conditions. *Industrial Crops and Products* **121: 187-194.**
64. Theologidou, D.S., A. Lazaridou, L. Zorić, and **I.T. Tsialtas.** **2018.** Cooking quality of lentils produced under Mediterranean conditions. *Crop Science* **58:2121-2130.**
65. **Tsialtas I.T.,** D. Baxevanos, D.N. Vlachostergios, C. Dordas, A. Lithourgidis. **2018.** Cultivar complementarity for symbiotic nitrogen fixation and water use efficiency in pea-oat intercrops and its effect on forage yield and quality. *Field Crops Research* **226: 28-37.**

66. **Tsialtas I.T.**, G.S. Theologidou and G.S. Karaoglanidis. **2018**. Effects of pyraclostrobin on leaf diseases, leaf physiology, yield and quality of durum wheat under Mediterranean conditions. *Crop Protection* **113**: 48-55.
67. **Tsialtas I.T.**, M. Irakli and A. Lazaridou. **2018**. Traits related to bruchid resistance and its parasitoid in vetch seeds. *Euphytica* **214**: 238.
68. Theologidou, D.S., D. Baxevanos and **I.T. Tsialtas**. **2018**. Mitigating thermal and water stress in lentil via cultivar selection and phosphorus fertilization. *Journal of Water and Climate Change* **9**: 728-735.
69. **Tsialtas, J.T.**, M. Irakli and A. Lazaridou. **2019**. Exit of seed weevil and its parasitoid changed testa color but not phenolic and tannin contents in faba beans. *Journal of Stored Products Research* **82**: 27-30.
70. Papagrigroriou, G., D. Papazoglou, D. Lazari, L. Zorić, and **J.T. Tsialtas**. **2019**. Hybridization effects on seed traits of annual *Datura* accessions focusing on oil concentration and composition. *Industrial Crops and Products* **132**: 69-75.
71. Ipsilantis, I., L. Lotos, and **I.T. Tsialtas**. **2019**. Diversity and nodulation effectiveness of rhizobia and mycorrhizal presence in climbing dry beans grown in Prespa lakes plain, Greece. *Archives of Microbiology* **201**: 1151-1161.
72. **Tsialtas, I.T.**, G.S. Theologidou, F. Biliass, M. Irakli, and A. Lazaridou. **2020**. Ex situ evaluation of seed quality and bruchid resistance in Greek accessions of red pea (*Lathyrus cicera* L.). *Genetic Resources and Crop Evolution* **67**: 985-997.
73. Baxevanos, D., **I.T. Tsialtas**, O. Voulgari, C.I. Pankou, D. Vlachostergios and A.S. Lithourgidis. **2020**. Oat genotypic requirement for intercropping with vetch under Mediterranean conditions. *Journal of Agricultural Science* **158**: 695-706.
74. Orfanidou, C.G., L. Lotos, G. Tsiolakis, S.K. Stefanidis, **J.T. Tsialtas**, N.I. Katis and V.I. Maliogka. **2021**. Molecular characterization of poleroviruses isolated from oilseed rape in Greece. *Virus Genes* **57**: 289-292.
75. Lotos, L., **J.T. Tsialtas**, N.I. Katis and V.I. Maliogka. **2021**. First report of bean leafroll virus (BLRV) naturally infecting common and bitter vetch and alfalfa in Greece. *Journal of Plant Pathology* **103**: 727.
76. Sareli, K., K. Gaitanis, **I.T. Tsialtas**, S. Winter and E.K. Chatzivassiliou. **2021**. First report of pea enation mosaic virus-1 infecting *Lathyrus ochrus* (L.) DC and *L. cicera* L. in Greece. *Journal of Plant Pathology* **103**: 729.
77. Gavrilis, V., L. Lotos, D. Molloy, S. Grinstead, **I.T. Tsialtas**, N.I. Katis and V.I. Maliogka. **2021**. First report of barley virus G infecting corn in Greece. *Journal of Plant Pathology* **103**: 1331.
78. Baxevanos, D., D. Loka and **I.T. Tsialtas**. **2021**. Evaluation of alfalfa cultivars under rainfed Mediterranean conditions. *Journal of Agricultural Science* **159**: 281-292.
79. Baxevanos, D., O. Voulgari, C. Pankou, M.D. Yiakoulaki and **I.T. Tsialtas**. **2022**. Comparing adaptive responses of new and old lucerne (*Medicago sativa*) genotypes under irrigated Mediterranean conditions. *Crop and Pature Science* **73**: 679-691.
80. Ipsilantis, I., G.S. Theologidou, F. Biliass, A. Karypidou, A. Kalyvas and **I.T. Tsialtas**. **2022**. Phosphorus fertilization may induce Zn deficiency in cotton (*Gossypium hirsutum* L.) on calcareous Mediterranean soils. *Functional Plant Biology* **49**: 382-391.
81. Boulata, K., M. Irakli and **I.T. Tsialtas**. **2022**. Similarities and differences of *Vicia sativa* subspp. *sativa* and *macrocarpa* for seed yield and quality. *Crop and Pature Science* **73**: 1354-1366.

82. Theologidou, G.S., I. Ipsilantis and **I.T. Tsialtas**. 2023. Phosphorus effects on four lentil cultivars grown on alkaline Mediterranean soil. *Nutrient Cycling in Agroecosystems* 125: 1-14.
83. Altunc, Y.E., P. Agraftioti, E. Lampiri, A. Guncan, **I.T. Tsialtas** and C.G. Athanassiou. 2023. Population growth of *Prostephanus truncatus* and *Sitophilus zeamais* and infestation patterns in three maize hybrids. *Journal of Stored Products Research* 101: 102091.
84. Konstantopoulos, A.N., S. Pozoukidou, M. Irakli and **I.T. Tsialtas**. 2023. Testa and hilum colour associations with seed traits in phenotypes of a Greek field pea landrace. *Plant Genetic Resources* 21: 90-95.
85. Siosiou, A., E.E. Sparks and **I.T. Tsialtas**. 2023. Brace roots in C3 Poaceae: where have they gone? *microPublication BIOLOGY* 10.17912/micropub.biology.000939.
86. Theologidou, G.S., I. Ipsilantis and **I.T. Tsialtas**. 2023. Leaf manganese and phenolics as proxies of soil acidification and phosphorus acquisition mechanisms in lentil cultivars on alkaline soil. *Functional Plant Biology* 50: 1028-1036.
87. **Tsialtas, I.T.** and M. Irakli. 2024. Flower/testa colour associations with grain yield, quality and tolerance to seed weevil in grass pea phenotypes. *Annals of Applied Biology* 184: 250-258.
88. **Tsialtas, I.T.** and M. Irakli. 2024. Bruchid infestation was associated with agronomic traits in field-grown faba bean genotypes. *Journal of Crop Health* 76: 461-470.
89. Ipsilantis, I., E. Korpetis and **I.T. Tsialtas**. 2024. Some agronomic traits affecting barley mycorrhization, grain yield and quality. *Genetika* 56: 269-279.

**Papers in international journals after reviewing**

1. **Tsialtas, J.T.**, M. Kassioumi and D.S. Veresoglou. 2001. N-niche spatiotemporal differentiation, <sup>15</sup>N uptake rates and community structure in a Mediterranean grassland. *Journal of Mediterranean Ecology* 2:93-105.
2. **Tsialtas, J.T.** and D.S. Veresoglou. 2007. Nitrogen Use Efficiency in a semi-arid community and its relationship with Water Use Efficiency and soil water and nitrogen. *World Journal of Agricultural Sciences* 3:485-488.
3. Tokatlidis, I.S. and **J.T. Tsialtas**. 2008. Comparative analysis of two crop yield potential models based on yield potential per plant of maize and bread wheat genotypes. *Asian Journal of Plant Sciences* 7:241-250.
4. **Tsialtas, J.T.** and I.S. Tokatlidis. 2008. Use of carbon isotope discrimination in breeding of C<sub>3</sub> cereals under water deficit conditions. *Asian Journal of Plant Sciences* 7:518-525. (short review)
5. **Tsialtas, I.**, I. Eleftherohorinos, G. Zarkos, V. Christodoulou and K. Tan. 2013. New Floristic Records 21, Record 130, Solanaceae, *Datura stramonium* f. *tatula* (L.) Geerinck & Walravens. *Phytologia Balcanica* 19:149-151.
6. **Tsialtas, I.**, and K. Tan. 2013. New Floristic Records 22, Records 114-116, Fabaceae, *Lathyrus annuus* L., *Lathyrus tuberosus* L., Solanaceae, *Datura stramonium* f. *tatula* (L.) Geerinck & Walravens. *Phytologia Balcanica* 19:290.
7. Baxevanos, D., **I.T. Tsialtas** and C. Goulas. 2013. Repeatability and stability analysis for fiber traits in upland cotton (*Gossypium hirsutum* L.). *Australian Journal of Crop Science* 7:1423-1429.
8. **Tsialtas, I.**, K. Tan and G. Vold. 2014. New Floristic Records 24, Records 132-136, Asteraceae, *Cynara cardunculus* L., *Xanthium orientale* subsp. *italicum* (Moretti) Greuter (= *Xanthium strumarium* subsp. *cavanillesii* (Schouw) D. Löve & Dans.,

- Gentianaceae, *Centaurium serpentinicola* Carlström, Caryophyllaceae, *Saponaria officinalis* L., Violaceae, *Viola parvula* Tineo. ***Phytologia Balcanica* 20:125-127.**
9. Lassen, P., **I. Tsialtas** and K. Tan. 2014. New Floristic Records 25, Records 146-148, Fabaceae, *Lathyrus tuberosus* L., *Vicia ochroleuca* Ten., *Vicia sativa* subsp. *incisa* L. ***Phytologia Balcanica* 20:285-286.**
  10. Tsialtas, I. and K. Tan. 2014. New Floristic Records 25, Records 240-241, Fabaceae, *Aeschynomene indica* L., Solanaceae, *Datura ferox* L. ***Phytologia Balcanica* 20:301.**
  11. Koutsomarkos, K., K. Tan and **I. Tsialtas**. 2015. New Floristic Records 27, Record 70, Polygonaceae, *Rumex vesicarius* L. ***Phytologia Balcanica* 21:201.**
  12. **Tsialtas, I.** and K. Tan. 2015. New Floristic Records 28, Records 122-126, Cucurbitaceae, *Sicyos angulatus* L., Fabaceae, *Aeschynomene rudis* Benth., Solanaceae, *Datura stramonium* f. *tatula* (L.) Geerinck & Walravens, *Solanum luteum* Mill., Poaceae, *Panicum capillare* L. ***Phytologia Balcanica* 21:384-385.**
  13. **Tsialtas, I.** and K. Tan. 2017. New Floristic Records 33, Records 209-211, Brassicaceae, *Brassica napus* L., Fabaceae, *Pisum sativum* L. subsp. *sativum*, Poaceae, *Panicum capillare* L. ***Phytologia Balcanica* 23: 319-320.**
  14. **Tsialtas, I.** and K. Tan. 2022. New Floristic Records 48, Records 93-94, Acanthaceae, *Acanthus mollis* L., Cucurbitaceae, *Sicyos angulatus* L. ***Phytologia Balcanica* 28: 270-271.**
  15. **Tsialtas, I.** and K. Tan. 2023. New Floristic Records 50, Records 123-124, Solanaceae, *Datura ferox* L., Poaceae, *Hordeum vulgare* subsp. *spontaneum* (K. Koch) Thell. ***Phytologia Balcanica* 29: 132-133.**

#### **Papers in national journals after reviewing**

1. **Tsialtas, I.** 2000. Stable carbon isotopes and water use efficiency in C<sub>3</sub> plant species. ***Geotechnical Scientific Issues* 11(4): 43-52. Review**
2. **Tsialtas, I. T.** 2001. Estimation of symbiotic N<sub>2</sub>-fixation in plants using <sup>15</sup>N natural abundance ( $\delta^{15}\text{N}$ ) method. ***Geotechnical Scientific Issues* 12(2): 141-152. Review**
3. Tamoutsidis, E., I. Tokatlidis, **I. Tsialtas** and K. Tzalis. 2002. Distribution of the micronutrients Mn, Fe, Zn in the aerial parts of bread wheat. ***Geotechnical Scientific Issues* 13(2): 52-56.**

#### **Papers in proceedings of international congresses**

1. Bletsos, F.A., N.D. Gantidis and **J.T. Tsialtas**. 2001. Heavy metal content of eggplant fruits grown on different levels of sewage sludge. ***Acta Horticulturae* 549: 153-158.**
2. Spanos, K., **I. Tsialtas** and G. Giakzidis. 2001. Biomass production from a short rotation coppice experimental planting of ten poplar clones in N. Greece. ***Proceedings of the 3<sup>rd</sup> Balkan Scientific Conference* 1: 326-335.**
3. **Tsialtas, J.T.**, M.T. Kassioumi and D.S. Veresoglou. 2002. Fertilisation effects on species diversity in an upland grassland in Greece. ***Grassland Science in Europe* 7: 854-855.**
4. Tokatlidis, I.S., I. Xynias, **J.T. Tsialtas** and I. Papadopoulos. 2004. An effective way for intra-cultivar selection in bread wheat. ***Proceedings of 4<sup>th</sup> International Crop Science Congress (ICSC), 26 September-1 October 2004, Brisbane, Australia.***
5. Karadimos, D.A., **J.T. Tsialtas**, N. Maslaris and D. Papakosta. 2005. Root rot diseases of sugarbeet (*Beta vulgaris* L.) as affected by defoliation intensity. ***Proceedings of 4<sup>th</sup> International Symposium on Sugar beet Protection, 26-28 September 2005, pp. 123-127, Novi Sad, Serbia.***
6. Koundouras, S., G. Bakratsa, E. Zioziou, N. Nikolaou and **J.T. Tsialtas**. 2006. Influence of irrigation and rootstock cultivar on gas exchange, growth and ripening of

- Cabernet-Sauvignon (*Vitis vinifera* L.) under the semi-arid conditions of central Greece. *Proceedings of 2<sup>nd</sup> International Conference Ampelos 2006, 1-3 June 2006, Santorini Island, Greece.*
7. **Tsialtas, J.T.**, C. Tsikrikoni, A.S. Lithourgidis and I.S. Tokatlidis. **2006.** Intra-cultivar variation in cotton: relationships between leaf carbon isotope discrimination and K concentration with seed-cotton yield. *Proceedings of 9<sup>th</sup> European Society for Agronomy Congress, 4-7 September 2006, pp. 243-244, Warsaw, Poland.*
  8. **Tsialtas, J.T.** and N. Maslari. **2006.** Soil and climatic factors affecting sugar beet yield variation in central Greece. *Proceedings of 9<sup>th</sup> European Society for Agronomy Congress, 4-7 September 2006, pp. 349-350, Warsaw, Poland.*
  9. Taskos, D., K. Karakioulakis, N. Theodorou, **J.T. Tsialtas**, E. Zioziou, N. Nikolaou and S. Koundouras. **2010.** Evaluation of two transmittance meters in estimating chlorophyll and nitrogen concentrations in grapevine cultivars. *Proceedings of VIII International Terroir Congress, 14-18 June 2010, pp. 462-467, Soave, Italy.*
  10. Taskos, D., K. Karakioulakis, N. Theodorou, **J.T. Tsialtas**, E. Zioziou, N. Nikolaou and S. Koundouras. **2011.** Water and nitrogen effects on carbon isotope composition ( $\delta^{13}\text{C}$ ) of field-grown grapevines under a Mediterranean climate. *Proceedings of 17<sup>th</sup> International Symposium GiESCO, 29 Aug-2 Sept 2011, pp. 41-44, Asti, Italy.*
  11. **Tsialtas, J.T.** and S.D. Koundouras. **2013.** Can leaf to air temperature difference substitute for stem water potential in grapevines? *Proceedings of 3<sup>rd</sup> International Conference Ampelos, 30-31 May 2013, Santorini Island, Greece.*
  12. Theologidou, G., D. Baxevanos and **J.T. Tsialtas**. **2017.** Growing lentils in a changing environment: cultivar selection and phosphorus fertilization as means for earliness. *Proceedings of Climate Changing Agriculture International Conference, 29 August-2 September 2017, Chania, Greece in press.*
  13. Linardakis, I., **I.T Tsialtas**, G. Menexes and C. Dordas. **2021.** Effect of N fertilisation and water stress on growth and yield of common bean intercropped with corn. Association of Applied Biologists, Intercropping for sustainability: Research developments and their application, 18-20 January 2021, Virtual conference. *Aspects of Applied Biology 146: 1-8.*

#### Abstracts in proceedings of international congresses

1. **Tsialtas, J.T.** and D.S. Veresoglou. **2000.** Carbon isotope discrimination ( $\Delta$ ) and biomass production in an upland Mediterranean grassland. *3<sup>rd</sup> International Crop Science Congress (ICSC), Book of Abstracts, p. 39, 17-22 August 2000, Hamburg, Germany.*
2. Theologidou, G., L. Zoric, A. Lazaridou, J. Lukovic and **J.T. Tsialtas**. **2015.** Cooking time of lentils (*Lens culinaris*) as related to seed coat anatomy, cultivar and P fertilization. *Eucarpia International Symposium on Protein Crops-V Meeting AEL, Book of Abstracts, p. 183, 4-7 May 2015, Pontevedra, Spain.*
3. Theologidou, G., I. ipsilantis and **I.T. Tsialtas**. **2018.** Influence of phosphorus fertilization on arbuscular mycorrhizal colonization and phosphatase activity on lentil (*Lens culinaris* Medik.). *7<sup>th</sup> Balkan Botanical Congress, Book of Abstracts, Session I. Plant Anatomy and Physiology, p. 11, 10-14 September 2018, Novi Sad, Serbia.*
4. Velios, V., A. Karypidou, I. Ipsilantis, I. Tokatlidis and **I.T. Tsialtas**. **2020.** Responsiveness of corn hybrids to mycorrhizal colonization: pot and field comparisons. *II. International Agricultural, Biological & Life Science Conference, p. 87, 1-3 September 2020, Edirne, Turkey.*

### **Books**

1. Baxevasos, D. and **J.T. Tsialtas. 2012.** Ensilage and Silage Crops. Thessaloniki, *pp.* 339. (in Greek)

### **Research interests**

1. Use of stable C isotopes for studying the water use efficiency variation in C<sub>3</sub> plant species.
2. Use of stable N isotopes for studying the N cycling focusing on symbiotic N<sub>2</sub>-fixation.
3. Soil-plant relationships and their effects on yield and quality of field crops.
4. Physiology from leaf to plant community level and its relationship with yield and quality of field crops.
5. Water relations and water stress tolerance.
6. Yield and quality of winter cereals and legumes, pasture plants, sugar beets, cotton and oil crops.
7. Evaluation of wild relatives as industrial crops.