

PERSONAL INFORMATION



Teodora Petrova Popova

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POSITION HELD AND
RESEARCH FIELD

Chief Assistant Professor,
Department of Developmental Biology, University of Plovdiv "Paisii Hilendarski";
genetics; cytogenetics; mutagenesis; *in vitro* plant tissue culture; anther culture of pepper (*Capsicum annuum* L.)

WORK EXPERIENCE

from 2005 – present - Chief Assistant Professor of Genetics - University of Plovdiv (laboratory practice; seminars; lectures of Genetics; Cytogenetics);
from 2002 to 2005 - Senior Assistant Professor of Genetics - University of Plovdiv (laboratory practice);
from 1995 to 2002 - Assistant Professor of Genetics - University of Plovdiv (laboratory practice);
from 1992 to 1995 – biologist in Department of Medical Biology; Medical University of Plovdiv;

EDUCATION AND TRAINING

2008 – PhD (Genetics), Scientific Council of Agronomy and Silviculture, BAS, Sofia;
Title of PhD thesis: Obtaining and genotype investigations of androgenic haploids
from Bulgarian pepper (*Capsicum annuum* L.) varieties.

1986-1991 B.Sc. and M.Sc., Biology and Nature Protection; Teacher of Biology; University of Plovdiv
"Paisii Hilendarski", Bulgaria

1986 Secondary School

1981 Primary School

PERSONAL SKILLS

Mother tongue(s) Bulgarian

Other language(s)

Replace with language

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English - B1/B2	English - B1/B2	English - B1/B2	English - B1/B2	English - B1/B2	English - B1/B2
Russian - B1/B2	Russian - B1/B2	Russian - B1/B2	Russian - B1/B2	Russian - B1/B2	Russian - B1/B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Organisational / managerial skills

- Training of students, working with graduate students, participation in research projects, coordination of project activities

Job-related skills

- Lead of educative work in the scope of genetics, cytogenetics and mutagenesis; work with computers and software products, optical equipment, etc. (Windows, MS Office, Word, Excel, Internet, Power Point, Media Player), mechanical and optical equipment in biology; microscopic technique; microphotography; laminar box and other devices and equipment required for specific academic and research work;

ADDITIONAL INFORMATION

Books:

1. Ivanova E., Staykova T., **Irikova T.** 2001. Human genetics (with elements of General Genetics), pp. 206. (In Bulgarian)
2. Ivanova E., Staykova T., **Irikova T.** 2002. Handbook of genetics, pp. 90. (In Bulgarian)
3. Popov P., **Irikova T.** 2004. General Genetics, pp. 246. (In Bulgarian)
4. Popov P., **Irikova T.** 2010. Cytogenetics. pp. 118. (In Bulgarian)

Projects

- 2005 – 2006 – Project leader "Obtaining and molecular-genetic investigations of haploids and dihaploid regenerants via anther culture of pepper (*Capsicum annuum* L.) and inclusion in the breeding practice" (Contract 05B73)
- 2005 – 2008 – Project team member, bilateral project Bulgaria - Greece "Application of biotechnological methods for multiplication micropropagation of virus free plants from sweet pepper (*Capsicum annuum* L.) by organogenesis and somatic embryogenesis" (Contract BG2/2005)
- 2006 – 2008 - Project team member, bilateral project Bulgaria - Macedonia "Obtaining of haploids in anther culture of pepper (*Capsicum annuum* L.) and including in the breeding process" (Contract BM2/2006)
- 2009 – 2010 – Project coordinator „Increasing the professional skills of the students of Department “Biology” by trainings in scientific and business sectors” (Contract BG051PO001-3.3.03-0025) – funded under the Operational Programme “Development of the Human Resources 2007 – 2013” and co-financed by the European Social Fund of the European Union
- 2011 – 2012 – Project team member "Monitoring of biological and chemical risk factors in food and their effects on human health " (Contract SI11 BF 006)
- 2014 – Performer „Plovdiv Electronic University (PEU): national standard for conducting quality e-learning in higher education” (Contract BG051PO001-4.3.04-0064) funded under the Operational Programme “Development of the Human Resources” and co-financed by the European Social Fund of the European Union
- 2014 – Functional expert “Students practices” (Contract BG051PO001-3.3.07-0002) funded under the Operational Programme “Development of the Human Resources” and co-financed by the European Social Fund of the European Union

Conferences/
Publications

- Irikova T.**, T. Vangelova, P. Popov, 2000. Mutagenetic action some insecticids on plant cells. – National Scientific – Practice Conference with International Participation “Man, Nature, Health”, 3 - 4 November 2000, Pamporovo - Bulgaria; Reports Coll., vol. I, 86-88.
- Apostolova E., **T. Irikova**, P. Popov, 2001. Cytotoxic and cytomutagenic influence of pesticide Vaztak 10 EK on *Crepis capillaris* sprouted seeds. – Jubilee Scientific Conference “30 years Shumen University “Episkop Konstantin Preslavski””, November 2001, Shumen - Bulgaria, Reports, Biology and Geography; Sci. Works Coll. “Natural Science” – Jubilee Scientific Conference “30 years Shumen University “Episkop Konstantin Preslavski””, Biology, 2003, pp. 70 – 76.
- Irikova T.**, V. Rodeva, 2002. *In vitro* anther's response of different pepper (*Capsicum annuum* L.) genotypes. Research Reports of the Union of Scientist in Bulgaria, 7-8 October, 2002.
- Stoyanov I., P. Vasileva, **T. Popova**, T. Staykova, E. Ivanova, 2013. Toxic and mutagenic effect of Verita WG on *Pisum Sativum* plant test system *in vivo*. Jubilee National Scientific Conference with International Participation “Traditions, Directions, Challenges”, Smolyan 19 – 21 Octomber 2012. Natural Science, Mathematics and Informatics, (Natural and Agricultural Sciences, Medicine), 1 (2): 37-45.

PUBLICATIONS

Publications –

- Irikov A., **T. Irikova**, 2000. Dependence to density of land shell molluscs (Gastropoda, *Pulmonata*) from dampness of substratum in beech associations in Dobrostanski ridge of West Rhodope mountains. Research Reports of the Union of Scientist in Bulgaria, B, I: 421 – 424.
- Svetleva D., D. Dimova, **T. Irikova**, M. Veltcheva, S. Petkova, 2001. Seed precultivation on media supplemented with different hormones and its influence of callus growth in Common bean (*Phaseolus vulgaris* L.). Biotechnology and Biotech. Eq. 15/2001/2, 12-16. IF 0.06
- Irikova T.**, E. Apostolova, P. Popov, 2002. Investigation of automutagenesis caused by natural ageing of seeds in *Crepis capillaris*. Trav. Sci. Univ. Plovdiv, Microbiologia et Cytologia, 2002. 38, 7, 23-28.
- Irikova T.**, E. Apostolova, P. Popov, 2003. Mutagenic effect from insecticide Vaztak 10 EK on *Crepis capillaris* *in vivo*. Trav. Sci. Univ. Plovdiv, Microbiologia et Cytologia, 2003,39,8, 17-22.
- Rodeva V., **T. Irikova**, V. Todorova, 2004. Anther culture of pepper (*Capsicum annuum* L.) : Comparative study on effect of the genotype. Biotechnology and Biotech. Eq. 18/2004/3, 34-38.
- Irikova T.**, V. Rodeva, 2004. Anther culture of pepper (*Capsicum annuum* L.): the effect of nutrient media. Capsicum and Eggplant Newsl. 23: 101–104.
- Irikova T.**, V. Rodeva, 2005. The effect of silver nitrate on in vitro embryogenesis in pepper (*Capsicum annuum* L.) anther culture. Genetics and Breeding, 34 (1-2): 33-38.
- Irikova T.**, I. Denev, 2008. Identification of two embryogenesis-related genes in sweet pepper (*Capsicum annuum* L.) genome. Comptes rendus de l'Academie bulgare des Sciences, Vol. 61, No 6, 761-770.
- Irikova T.**, 2008. Obtaining and genotype investigations of androgenic haploids from Bulgarian pepper (*Capsicum annuum* L.) varieties. Thesis for acquisition of Ph. D. Degree, pp. 199.
- Irikova T.**, P. Popov, S. Grozeva, V. Rodeva, 2009. *In vitro* reactions in anther culture of sweet pepper (*Capsicum annuum* L.) cultivars and breeding lines of different types. Genetics and Breeding, BG, 38(3-4): 15-23.
- Irikova T.**, S. Grozeva, V. Rodeva, 2011. Anther culture in pepper (*Capsicum annuum* L.) *in vitro*. Review. Acta Physiol. Plant. 33(5), 1559-1570. DOI 10.1007/s11738-011-0736-6. IF 1.692
- Irikova T.**, S. Grozeva, P. Popov, V. Rodeva, E. Todorovska, 2011. *In vitro* response of pepper anther culture (*Capsicum annuum* L.) depending on genotype, nutrient medium and duration of cultivation. Biotechnology and Biotech. Eq. 25(4), 1-7, DOI 10.5504/BBEQ.2011.0090. IF 0.76
- Irikova T.**, S. Grozeva, I. Denev, 2012. Identification of BABY BOOM and LEAFY COTYLEDON genes in sweet pepper (*Capsicum annuum* L.) genome by their partial gene sequences. Plant Growth Regul. 67(2):191-198. DOI 10.1007/s10725-012-9676-4. IF 2.333
- Popova (Irikova) T.**, S. Kintzios, S. Grozeva, V. Rodeva, 2016. Pepper (*Capsicum annuum* L.) anther culture – fundamental research and practical applications. Turkish Journal of Biology. 40:719-726. ISSN: 1300-0152 (Print) 1303-6092 (Online). IF 1.183.
- Popova T.**, S. Grozeva, V. Todorova, G. Stankova, N. Anachkov, V. Rodeva. 2016. Effects of low temperature, genotype and culture media on in vitro androgenic answer of pepper (*Capsicum annuum* L.). Acta Physiologae Plantarum. 38:273. DOI 10.1007/s11738-016-2294-4. ISSN: 0137-5881 (Print) 1861-1664 (Online). IF 1.563

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Article: Rodeva V., T. Irikova, V. Todorova, 2004. Anther culture of pepper (*Capsicum annuum L.*) : Comparative study on effect of the genotype. Biotechnology and Biotech. Eq. 18/2004/3, 34-38.

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- Koleva-Gudeva, L.R., Spasenoski, M. and Trajkova, F., 2007. Somatic embryogenesis in pepper anther culture: The effect of incubation treatments and different media. *Scientia Horticulturae*, 111(2), pp.114-119.
- Koleva Gudeva, L., Trajkova, F. and Spasenoski, M., 2007. Effectiveness of androgenesis induced in anther culture of pepper (*Capsicum annuum L.*). *Progress in Research on Capsicum and Eggplant*.
- Masheva, S.T. and Mihov, M., 2008. September. Trends of the research work in vegetable crops and potatoes in Bulgaria. In IV Balkan Symposium on Vegetables and Potatoes 830 (pp. 45-52).
- Koleva-Gudeva, L., Trajkova, F., Dimeska, G. and Spasenoski, M., 2008. September. Androgenesis efficiency in anther culture of pepper (*Capsicum annuum L.*). In IV Balkan Symposium on Vegetables and Potatoes 830 (pp. 183-190).
- Nowaczky PA, Nowaczky LU, 2009. Haploid embryogenesis in capsaicinoid forms of soft-flesh *Capsicum* spp. *Herba Polonica*. 55(3):251-6.
- Koleva Gudeva, L. and Trajkova, F., 2012. Anther culture of pepper: Morphological characteristics of fruits of androgenetic pepper lines (*Capsicum annuum L.*). *Journal of research in agriculture*, 1(2), pp.136-145.
- Niklas-Nowak, A., Olszewska, D., Kisiala, A. and Nowaczkyk, P., 2012. Study of individual plant responsiveness in anther cultures of selected pepper (*Capsicum spp.*) genotypes. *Folia Horticulturae*, 24(2), pp.141-146.
- 付文婷, 苏丹, 杨红 and 杨万荣, 2012. 辣椒离体再生培养及其在育种中的应用. 农业科学与技术: 英文版, 13(8), pp.1670-1674.
- 张正海, 毛胜利, 王立浩 and 张宝玺, 2012. 辣椒单倍体离体诱导及育种应用. 园艺学报, 39(9), pp.1715-1726.
- Koleva Gudeva, L., Gulaboski, R., Janevik-Ivanovska, E., Trajkova, F. and Maksimova, V., 2013. Capsaicin-Inhibitory factor for Somatic Embriogenesis in Pepper Anther Culture. *Electronic Journal of Biology*, 9(2), pp.29-36.
- Koleva-Gudeva, L., Trajkova, F. and Zlatkovski, V., 2013. Biotechnology and Biodiversity: Aspects of Improvement of Genetic Resources of Agriculture Crops. *Yearbook-Faculty of Agriculture*, 8(1), pp.pp.57.
- Luitel, B.P. and Kang, W.H., 2013. In vitro androgenic response of minipaprika (*Capsicum annuum L.*) genotypes in different culture media. *Horticulture, Environment, and Biotechnology*, 54(2), pp.162-171.
- Basay, S. and Ellialtioglu, S.Ş., 2013. Effect of genotypical factors on the effectiveness of anther culture in eggplant (*Solanum melongena L.*). *Turkish Journal of Biology*, 37(4), pp.499-505.
- 付文婷, 韩世玉, 邢丹, 廖芳芳, 苏丹, 张爱民, 蓬桂华 and 何建文, 2014. 不同培养基及采花期对辣椒花药培养的影响. *河南农业科学*, 43(10), pp.83-86.
- ALREMI, F., TAŞKIN, H., SÖNMEZ, K., BÜYÜKALACA, S. and ELLİALTIOĞLU, Ş., 2014. Biber (*Capsicum annuum L.*)de Genotip ve Besin Ortamının Anter Kültürüne Etkileri. *Türk Tarım ve Doğa Bilimleri*, 1(2), pp.108-116.
- 李晓慧, 徐小利, 常高正, 赵卫星 and 梁慎, 2014. 西瓜新品种圣达尔的选育. *河南农业科学*, 43(10), pp.92-94.
- 李怡斐, 黄启中, 张世才, 林清, 吕中华 and 黄任中, 2014. 辣椒花药培养及其在遗传育种上的应用. *辽宁农业科学*, (5), pp.30-37.
- Pelliccione, S., 2014. Microspore embryogenesis induction in hot pepper genotypes|. *Universidad de Granada*
- Barroso, P.A., Rêgo, M.M., Rêgo, E.R. and Soares, W.S., 2015. Embryogenesis in the anthers of different ornamental pepper (*Capsicum annuum L.*) genotypes. *Genetics and Molecular Research*, 14(4), pp.13349-13363.
- Kouakou, K.L., Doubi, T.S., Koffi, T.S., Kouassi, K.I., Kouakou, T.H., Baudoin, J.P. and Bi, I.A.Z., 2015. Androgenic potential and anther in vitro culture of *Lagenaria siceraria* (Molina) Standl an edible-seed cucurbit. *International Journal of Biological and Chemical Sciences*, 9(4), pp.1779-1789.
- Atilla, A.T.A. and Bitkileri, B., SAHİP BİBERLERDE (*Capsicum annuum L.*) ANTER KÜLTÜRÜNE MEVSİM ETKİSİ.
- Ari, E., Yıldırım, T., Mutlu, N., BÜYÜKALACA, S., GÖKMEN, Ü., & Akman, E., 2016. Comparison of different androgenesis protocols for doubled haploid plant production in ornamental pepper (*Capsicum annuum L.*). *Turkish Journal of Biology*, 40(4), 944-954.
- Ari, E., Bedir, H., Yıldırım, S., & Yıldırım, T. 2016. Androgenic responses of 64 ornamental pepper (*Capsicum annuum L.*) genotypes to shed-microspore culture in the autumn season. *Turkish Journal of Biology*, 40(3), 706-717.
 - Nowaczkyk, L., Nowaczkyk, P., & Olszewska, D. 2016. Treating donor plants with 2, 4-dichlorophenoxyacetic acid can increase the effectiveness of induced androgenesis in *Capsicum* spp. *Scientia Horticulturae*, 205, 1-6.

Article: Irikova T., V. Rodeva, 2004. Anther culture of pepper (*Capsicum annuum L.*): the effect of nutrient media. *Capsicum and Eggplant Newslett.* 23: 101–104.

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- Koleva-Gudeva, L.R., Spasenoski, M. and Trajkova, F., 2007. Somatic embryogenesis in pepper anther culture: The effect of incubation treatments and different media. *Scientia Horticulturae*, 111(2), pp.114-119.
- Koleva-Gudeva, L., Trajkova, F., Dimeska, G. and Spasenoski, M., 2008, September. Androgenesis efficiency in anther culture of pepper (*Capsicum annuum L.*). In *IV Balkan Symposium on Vegetables and Potatoes 830* (pp. 183-190).
- 成妍, 马蓉丽, 焦彦生 and 吴海涛, 2012. 辣椒花药培养研究进展. *中国农学通报*, 28(22), pp.113-118.
- Rodeva, V., Gudeva, L.K., Grozeva, S. and Trajkova, F., 2013. Obtaining haploids in anther culture of pepper *Capsicum annuum L.* and their inclusion in the breeding process. *Yearbook-Faculty of Agriculture*, 7(1), pp. pp-7.
- Koleva-Gudeva, L., Trajkova, F. and Zlatkovski, V., 2013. Biotechnology and Biodiversity: Aspects of Improvement of Genetic Resources of Agriculture Crops. *Yearbook-Faculty of Agriculture*, 8(1), pp. pp-57.
- Roshany, G., Kalantarai, S., Naderi, R. and Hassani, M.E., 2013. Callus Formation via Anther Culture in *Capsicum annuum L.* with Differences in Genotypes, Media and Incubation Temperature.
- Koleva Gudeva, L., Gulaboski, R., Janevik-Ivanovska, E., Trajkova, F. and Maksimova, V., 2013. Capsaicin-Inhibitory factor for Somatic Embriogenesis in Pepper Anther Culture. *Electronic Journal of Biology*, 9(2), pp.29-36.
- Barroso, P.A., Régo, M.M., Régo, E.R. and Soares, W.S., 2015. Embryogenesis in the anthers of different ornamental pepper (*Capsicum annuum L.*) genotypes. *Genetics and Molecular Research*, 14(4), pp.13349-13363.

Article: Irikova T., V. Rodeva, 2005. The effect of silver nitrate on in vitro embryogenesis in pepper (*Capsicum annuum L.*) anther culture. *Genetics and Breeding*, 34 (1-2): 33-38.

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- 张正海, 毛胜利, 王立浩 and 张宝玺, 2012. 辣椒单倍体离体诱导及育种应用. *园艺学报*, 39(9), pp.1715-1726.
- Luitel, B.P. and Kang, W.H., 2013. In vitro androgenic response of minipaprika (*Capsicum annuum L.*) genotypes in different culture media. *Horticulture, Environment, and Biotechnology*, 54(2), pp.162-171.
- 李怡斐, 黄启中, 张世才, 林清, 吕中华 and 黄任中, 2014. 辣椒花药培养及其在遗传育种上的应用. *辽宁农业科学*, (5), pp.30-37.

Article: Irikova T., I. Denev, 2008. Identification of two embryogenesis-related genes in sweet pepper (*Capsicum annuum L.*) genome. *Comptes rendus de l'Academie bulgare des Sciences*, Vol. 61, No 6, 761-770.

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- 沈顺 and 陈启武, 2013. 辣椒营养器官离体培养中体胚发生研究进展. *中国蔬菜*, (11X), pp.9-14.

Article: Irkova T., S. Grozeva, P. Popov, V. Rodeva, E. Todorovska, 2011. *In vitro* response of pepper anther culture (*Capsicum annuum* L.) depending on genotype, nutrient medium and duration of cultivation. Biotechnology and Biotech. Eq. 25(4), 1-7, DOI 10.5504/BBEQ.2011.0090.

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- Luitel, B.P., Adhikari, P.B., Shrestha, S.L. and Kang, W.H., 2012. Morphological characterization of anther derived plants in minipaprika (*Capsicum annuum* L.). Korean Journal of Breeding Science, 44(4), pp.450-461.
- Luitel, B.P. and Kang, W.H., 2013. In vitro androgenic response of minipaprika (*Capsicum annuum* L.) genotypes in different culture media. Horticulture, Environment, and Biotechnology, 54(2), pp.162-171.
- Asif, M., 2013. Progress and opportunities of doubled haploid production. Springer.
- Asif, M., 2013. Applications and Uses of Haploids. In Progress and Opportunities of Doubled Haploid Production (pp. 55-70). Springer International Publishing.
- BAŞAY, S. and ELLİALTIOĞLU, Ş.Ş., 2013. Effect of genotypical factors on the effectiveness of anther culture in eggplant (*Solanum melongena* L.). Turkish Journal of Biology, 37(4), pp.499-505.
- Perera, P.I., Ordoñez, C.A., Dedicova, B. and Ortega, P.E.M., 2014. Reprogramming of cassava (*Manihot esculenta*) microspores towards sporophytic development. AoB Plants, 6, p.plu022.
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[Curriculum Vitae](#)

[Teodora Petrova Popova](#)

- Parra-Vega, V., Renau-Morata, B., Sifres, A. and Seguí-Simarro, J.M., 2013. Stress treatments and in vitro culture conditions influence microspore embryogenesis and growth of callus from anther walls of sweet pepper (*Capsicum annuum* L.). *Plant Cell, Tissue and Organ Culture (PCTOC)*, 112(3), pp.353-360.
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- Lantos, C., Juhász, A.G., Vági, P., Mihály, R., Kristóf, Z. and Pauk, J., 2012. Androgenesis induction in microspore culture of sweet pepper (*Capsicum annuum* L.). *Plant biotechnology reports*, 6(2), pp.123-132.
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- Parra-Vega, V., González-García, B. and Seguí-Simarro, J.M., 2013. Morphological markers to correlate bud and anther development with microsporogenesis and microgametogenesis in pepper (*Capsicum annuum* L.). *Acta physiologiae plantarum*, 35(2), pp.627-633.
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