

## СПИСЪК

### на научните трудове на гл. асистент д-р Васил Георгиев Георгиев

Списъкът съдържа 64 научни труда, от които 1 автореферат на дисертация за придобиване на образователна и научна степен “Доктор”, 5 глави от книги, издадени в чужбина, 32 публикации в специализирани реферирани списания с импакт фактор (в това число 1 редакторска статия и 7 обзорни статии), 10 публикации в реферирани списания без импакт фактор, 16 публикации отпечатана в пълен текст в сборници от конференции. За настоящия конкурс кандидата кандидатства с 49 научни труда (публикации с номера 16-64 от приложения списък).

#### Автореферат за придобита образователна и научна степен “Доктор”:

- 1) **Георгиев В.** 2008. Биосинтез на беталаинови пигменти от растителни *in vitro* системи *Beta vulgaris*. Институт по микробиология “Стефан Ангелов” – БАН, София.

#### Публикации включени в дисертацията за придобиване на образователна и научна степен “Доктор”:

##### Обзорни статии:

- 2) **Georgiev, V.**, Ilieva M., Bley Th. and Pavlov A. (2008): Betalain production in plant *in vitro* systems. *Acta Physiologiae Plantarum* 30(5), 581-593; (IF / 2008 - 0,807)

##### Публикации в реферирани списания с импакт фактор:

- 3) Pavlov, A., **Georgiev V.** and Ilieva M. (2005): Betalain biosynthesis by red beet (*Beta vulgaris* L.) hairy root culture. *Process Biochemistry*, 40(5), 1531-1533; (IF / 2005 - 1,796)
- 4) Pavlov, A., **Georgiev V.** and Kovatcheva P. (2003): Relationship between type and age of the inoculum cultures and betalains biosynthesis by *Beta vulgaris* hairy root culture. *Biotechnology Letters*, 25(4), 307-309; (IF / 2003 - 0,778)
- 5) Pavlov, A., Kovatcheva P., **Georgiev V.**, Koleva I. and Ilieva M. (2002): Biosynthesis and radical scavenging activity of betalains during the cultivation of red beet (*Beta vulgaris*) hairy root cultures. *Zeitschrift fur Naturforschung C*, 57(7-8), 640-644. (IF / 2002 - 0,783)

##### Публикации, отпечатани в пълен текст в сборници от конференции:

- 6) **Георгиев В.\***, Павлов А. Илиева М. (2008): Физиологичен отговор на трансформирана коренова култура *Beta vulgaris* cv. Detroit Dark Red при елиситиране с ванадил сулфат. *Научни трудове - УХТ*, 55(1): 313-318.

- 7) **Георгиев В.\***, Павлов А. Илиева М. (2008): Биосинтез на беталаини от трансформирана коренова култура *Beta vulgaris* cv. Detroit Dark Red при елиситиране с ванадил сулфат. *Научни трудове - VXT*, 55(1): 319-324.
- 8) **Georgiev, V.\***, Weber, J., Pavlov, A., Pieva, M. and Bley, Th. (2007): Flow cytometry investigations of *Beta vulgaris* cv. Egypt and *in vitro* systems obtained from it. *Scientific works of The University of Food Technologies*, 54(1): 425-430;
- 9) **Георгиев В.\*** (2004): Биосинтез на беталаини от трансформирана коренова култура *Beta vulgaris* cv. Detroit Dark Red: влияние на компонентите на хранителната среда. *Научни трудове - VXT*, 51(3): 183-189.

**Публикации свързани с дисертацията за придобиване на образователна и научна степен “Доктор” но невключени в нея:**

**Публикации в реферирани списания с импакт фактор:**

- 10) **Georgiev V.**, Weber J., Kneschke E., Denev P., Bley T. and Pavlov A. (2010): Antioxidant activity and phenolic content of betalain extracts from intact plants and hairy root cultures of the red beetroot *Beta vulgaris* cv. Detroit Dark Red. *Plant Foods for Human Nutrition*, 65, 105–111; (IF / 2010 - 2,463)
- 11) Weber J., **Georgiev V.**, Haas C., Bley T. and Pavlov A. (2010): Ploidy levels in *Beta vulgaris* (red beet) plant organs and *in vitro* systems. *Engineering in Life Sciences*, 10(2), 139 - 147; (IF / 2010 - 1,504)
- 12) **Georgiev V.**, Weber J., Bley Th. and Pavlov A. (2009): Improved procedure for nucleus extraction for DNA measurements by flow cytometry of red beet (*Beta vulgaris* L.) hairy roots. *Journal of Bioscience and Bioengineering*, 107(4), 439-441; (IF / 2009 - 1,749)

**Публикации извън настоящия конкурс:**

**Публикации в реферирани списания с импакт фактор:**

- 13) **Georgiev, V.**, Marchev, A., Nikolova, M., Ivanov, I., Gochev, V., Stoyanova, A., Pavlov, A. (2013): Chemical compositions of essential oils from leaves and flowers of *Salvia ringens* Sibth. et Sm. growing wild in Bulgaria. *Journal of Essential Oil Bearing Plants*, 16(5): 624-629. DOI:10.1080/0972060X.2013.854490; (IF / 2013 – 0,187).
- 14) Marchev, A., **Georgiev, V.**, Nikolova, M., Gochev, V., Stoyanova, A., Pavlov, A. (2012). Chemical composition of essential oil of *Salvia scabiosifolia* Lam. from Bulgaria. *Journal of Essential Oil Bearing Plants*, 15(6), 908-914; (IF / 2012 - 0,172);

**Публикации в реферирани списания без импакт фактор:**

- 15) Marchev, A., Ivanov, I., Denev, P., Nikolova, M., Gochev, V., Stoyanova, A., Pavlov, A. **Georgiev, V.\*** (2015). Acetylcholinesterase inhibitory, antioxidant, and antimicrobial activities of *Salvia tomentosa* Mill. essential oil. *Journal of Bioscience and Biotechnology*, 4(2): 219-229

**Публикации извън дисертацията за придобиване на образователна и научна степен “Доктор” и обект на настоящия конкурс:****Глави от книги:**

- 16) **Georgiev V.**, Ananga A., Tsoлова V. (2016): Dietary Supplements/Nutraceuticals Made from Grapes and Wines. In: Wine Safety, Consumer Preference, and Human Health, (M.V. Moreno-Arribas, B. Bartolome eds.); **Springer International Publishing**, ISBN: 978-3-319-24512-6, DOI: 10.1007/978-3-319-24514-0\_10, pp 201-227.
- 17) **Georgiev, V.**, Marchev, A., Berkov, S., Pavlov, A. (2013): Plant *in vitro* systems as sources of tropane alkaloids. In: Handbook of Natural Products, (K.G. Ramawat, J.M. Merillon eds.); **Springer-Verlag, Berlin Heidelberg**, ISBN 978-3-642-22143-9, pp. 173-211;
- 18) Ananga A., **Georgiev V.**, Ochieng J., Phills B., Tsoлова V. (2013): Production of anthocyanins in grape cell cultures: A potential source of raw material for pharmaceutical, food, and cosmetic industries. In: The Mediterranean Genetic Code - Grapevine and Olive, (D. Poljuha and B. Sladonja Eds.), **InTech, Croatia**, ISBN 980-953-307-597-1, pp. 247-287;
- 19) **Georgiev V.**, Bley T. and Pavlov A. (2012): Bioreactors for the cultivation of red beet hairy roots. In: Red Beet Biotechnology, (B Neelwarne Ed.); **Springer, New York, USA**. ISBN 978-1-4614-3457-3, pp251-281.
- 20) Georgiev, M., **Georgiev, V.**, Weber, J., Bley, T., Ilieva, M., Pavlov, A. (2008): *Agrobacterium rhizogenes*-mediated genetic transformations: A powerful tool for the production of metabolites. In: Genetically Modified Plants, (T. Wolf and J. Koch edits.); **Nova Science Publishers, Hauppauge, NY, USA**, ISBN: 978-1-60456-696-3, pp. 99-126;

**Обзорни статии:**

- 21) **Georgiev, V.\***, Schumann, A., Pavlov, A., Bley, T. (2014). Temporary immersion systems in plant biotechnology. *Engineering in Life Sciences*, 14(6), 607-621. **(IF / 2014 - 2.485)**
- 22) Berkov, S., Ivanov, I., **Georgiev, V.**, Codina, C., Pavlov, A. (2014). Galanthamine biosynthesis in plant *in vitro* systems. *Engineering in Life Sciences*, 14(6), 643-650. **(IF / 2014 - 2.485)**
- 23) **Georgiev, V.\***, Ananga, A., Tsoлова, V. (2014). Recent Advances and Uses of Grape Flavonoids as Nutraceuticals. *Nutrients*, 6(1), 391-415. **(IF / 2014 - 3.270)**
- 24) Marchev A., Haas C., Schulz S., **Georgiev V.**, Steingroewer J., Bley T., Pavlov A. (2013): Sage *in vitro* cultures: a promising tool for the production of bioactive terpenes and phenolic substances. *Biotechnology Letters*, 36(2), 211-221, DOI: 10.1007/s10529-013-1350-z, ISSN 0141-5492. **(IF / 2013 - 1.736)**
- 25) Ananga A, **Georgiev V**, Tsoлова V. (2013): Manipulation and engineering of metabolic and biosynthetic pathway of plant polyphenols. *Current Pharmaceutical Design*, 19: 6186-6206; **(IF / 2013 - 3.288)**
- 26) Steingroewer J., Bley T., **Georgiev V.**, Ivanov I., Lenk F., Marchev A. and Pavlov A. (2013): Bioprocessing of differentiated plant *in vitro* systems. *Engineering in Life Sciences*. 13(1): 36-38. DOI: 10.1002/elsc.201100226; **(IF / 2013 - 1.89)**

**Редакторски статии:**

- 27) **Georgiev, V.\*** (2015): Mass Propagation of Plant Cells—An Emerging Technology Platform for Sustainable Production of Biopharmaceuticals. *Biochem Pharmacol (Los Angel)*, 4, p.e180.

**Публикации в реферирани списания с импакт фактор:**

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- 28) Georgieva, L., Ivanov, I., Marchev, A., Aneva, I., Denev, P., **Georgiev, V.**, Pavlov, A. (2015). Protopine Production by *Fumaria* Cell Suspension Cultures: Effect of Light. *Applied Biochemistry and Biotechnology*, 176(1), 287-300. (IF / 2014 - 1.735)
- 29) **Georgiev, V.\***, Ivanov, I., Berkov, S., Pavlov, A. (2014): Temporary immersion systems for Amaryllidaceae alkaloids biosynthesis by *Pancreatum maritimum* L. shoot culture. *Journal of Plant Biochemistry and Biotechnology*, 23(4): 389-398; (IF / 2014 - 1.094)
- 30) Ivanov, I., **Georgiev, V.\***, Berkov, S., Pavlov, A. (2013): Elicitation of galanthamine biosynthesis by *Leucojum aestivum* liquid shoot cultures. *Journal of Plant Physiology*, 170(12): 1122-1129; (IF / 2013 - 2.77)
- 31) **Georgiev, V.\***, Ivanov, I., Berkov, S., Ilieva, M., Georgiev, M., Gocheva, T., Pavlov, A. (2012): Galanthamine production by *Leucojum aestivum* L. shoot culture in a modified bubble column bioreactor with internal sections. *Engineering in Life Sciences*, 21(5): 534-543. DOI: 10.1002/elsc.201100177, (IF / 2012 - 1,633)
- 32) Ivanov, I., **Georgiev, V.\***, Berkov, S., Pavlov, A. (2012): Alkaloid patterns in *Leucojum aestivum* shoot culture cultivated at temporary immersion conditions. *Journal of Plant Physiology*, 169(2), 206-211; (IF / 2012 - 2.699)
- 33) Marchev, A., **Georgiev, V.**, Ivanov, I., Badjakov, I., Pavlov, A. (2011): Two-phase temporary immersion system for *Agrobacterium rhizogenes* genetic transformation of sage (*Salvia tomentosa* Mill.). *Biotechnology Letters*, 33(9), 1873-1878; (IF / 2011 - 1.683)
- 34) **Georgiev, V.**, Ivanov, I., Berkov, S. and Pavlov, A. (2011): Alkaloids biosynthesis by *Pancreatum maritimum* L. shoots in liquid culture. *Acta Physiologiae Plantarum*, 33(3), 927-933; (IF / 2011 - 1,639)
- 35) Stancheva, N., Weber, J., Schulze, J., Alipieva, K., Ludwig-Müller, J., Haas, C., **Georgiev, V.**, Bley T. and Georgiev M. (2011): Phytochemical and flow cytometric analyses of Devil's claw cell cultures. *Plant Cell, Tissue and Organ Culture*, 105(1), 79-84; (IF / 2011 - 3,09)
- 36) Ivanov, I., **Georgiev, V.**, Georgiev, M., Ilieva, M. and Pavlov, A. (2011): Galanthamine and related alkaloids production by *Leucojum aestivum* L. shoot culture using a temporary immersion technology. *Applied Biochemistry and Biotechnology*, 163(2), 268-277; (IF / 2011 - 1,943)
- 37) Berkov, S., Pavlov, A., **Georgiev, V.**, Weber, J., Bley, T., Viladomat, F., Bastida, J. and Codina, C. (2010): Changes in apolar metabolites during *in vitro* organogenesis of *Pancreatum maritimum*. *Plant Physiology and Biochemistry*, 48(10-11), 827-835; (IF / 2010 - 2,402)
- 38) Georgiev M., **Georgiev V.**, Penchev P., Antonova D., Pavlov A., Ilieva M. and Popov S. (2010): Volatile metabolic profiles of cell suspension cultures of *Lavandula vera*, *Nicotiana tabacum* and *Helianthus annuus*, cultivated under different regimes. *Engineering in Life Sciences*, 10(2), 148 – 157; (IF / 2010 - 1,504)
- 39) Pavlov, A., **Georgiev, V.**, Marchev, A. and Berkov, S. (2009): Nutrient medium optimization for hyoscyamine production in diploid and tetraploid *Datura stramonium* L. hairy root cultures. *World Journal of Microbiology and Biotechnology*, 25(12), 2239-2245; (IF / 2009 - 1,082)
- 40) **Georgiev, V.**, Berkov, S., Georgiev, M., Burrus, M., Codina, C., Bastida, J., Ilieva, M. and Pavlov, A. (2009): Optimized nutrient medium for galanthamine production in *Leucojum aestivum* L. *in vitro* shoot system. *Zeitschrift für Naturforschung C*, 64, 219-224; (IF / 2009 - 0,81)
- 41) Berkov S., Pavlov A., **Georgiev V.**, Bastida J., Burrus M., Ilieva M. and Codina C. (2009): Alkaloid synthesis and accumulation in *Leucojum aestivum* *in vitro* cultures. *Natural Product Communications*, 4(3), 359-364; (IF / 2009 - 0,766)
- 42) Weber, J., **Georgiev, V.**, Pavlov, A. and Bley, Th. (2008): Flow cytometric investigations of diploid and tetraploid plants and *in vitro* cultures of *Datura stramonium* and *Hyoscyamus niger*. *Cytometry A*, 73(A), 931-939; (IF / 2008 - 3,259)

- 43) Pavlov, A., Berkov, S., Courrot, E., Gocheva, T., Tuneva, D., Pandova, B., Georgiev, M., **Georgiev, V.**, Yanev, S., Burrus, M. and Ilieva, M. (2007): Galanthamine production by *Leucojum aestivum* in vitro systems. *Process Biochemistry*, 42(4), 734-739; (IF / 2007 - 2,336)

**Публикации в реферирани списания без импакт фактор:**

- 44) Hall, J., Ananga, A., **Georgiev, V.**, Ochieng, J., Cebert, E., Tsoleva, V. (2015). Molecular Cloning, Characterization, and Expression Analysis of Flavanone 3-Hydroxylase (F3H) Gene during Muscadine Grape Berry Development. *J. Biotechnol. Biomater.*, 5(2): 180.
- 45) **Georgiev, V.\***, Ananga, A., Tsoleva, V. (2015). Molecular Breeding of Synchronized Grape Cell Suspensions for Flavonoid Overexpression. *Acta Horticulturae*, 1082, 245-253.
- 46) Ivanov, I., Vrancheva, R., Marchev, A., Petkova, N., Aneva, I., Denev, P., **Georgiev, V.** and Pavlov, A. (2014): Antioxidant activities and phenolic compounds in Bulgarian *Fumaria* species. *Int. J. Curr. Microbiol. App. Sci* 3(2): 296-306.
- 47) Marchev, A., **Georgiev, V.**, Ivanov I., Pavlov, A. (2012). Cultivation of diploid and tetraploid hairy roots of *Datura stramonium* L. in stirred tank bioreactor for tropane alkaloids production. *Journal of Bioscience and Biotechnology*, 1(3): 211-216.
- 48) **Georgiev, V.\***, Marchev, A., Haas, C., Weber, J., Nikolova, M. and Pavlov, A. (2011): Production of oleanolic and ursolic acids by callus cultures of *Salvia tomentosa* Mill. *Biotechnology & Biotechnological Equipment*, 25(SE1), 34-38.
- 49) Marchev, A., **Georgiev, V.**, Badjakov, I., Kondakova, V., Nikolova, M. and Pavlov, A. (2011): Triterpenes production by rhizogenic callus of *Salvia scabiosifolia* Lam. obtained via *Agrobacterium rhizogenes* mediated genetic transformation. *Biotechnology & Biotechnological Equipment*, 25(SE1), 30-33.
- 50) **Георгиев, В.\*** (2011): Организация на ядрения геном в растителни in vitro системи и влиянието му върху биосинтеза на биологичноактивни вторични метаболити. *НОВОСТИ Месечен бюлетин за наука и технологии*, ISSN 1312-2436, 3(91), 4.
- 51) **Georgiev V.\***, Ivanov I. and Pavlov A. (2010): Obtaining and selection of *Pancreaticum maritimum* L. in vitro cultures with acetylcholinesterase inhibitory action. *Biotechnology & Biotechnological Equipment*, 24(SE), 149-154.
- 52) **Georgiev, V.**, Stukert, A., Bley, Th. and Pavlov, A. (2008): Hyosциамин biosynthesis by diploid and tetraploid *Datura stramonium* L. hairy root cultures in a temporary immersion cultivation system. *Advances in Bulgarian Science* 2-3, 42-47;

**Публикации, отпечатани в пълен текст в сборници от конференции:**

- 53) Georgieva, L., Ivanov, I., Marchev, A., Aneva, I., **Georgiev, V.**, Denev, P. and Pavlov, A. (2015). Initiation and selection of callus cultures from *Fumaria rostellata* Knaf. as potential producers of isoquinoline alkaloids. *Scientific Bulletin. Series F. Biotechnologies*, 19, pp.52-57.
- 54) Иванов, И., Вранчева, Р., Петкова, Н., Анева, И., Денев, П., **Георгиев, В.**, Павлов, А. (2013): Сравнително изследване на полифенолния профил на две популации от *Fumaria officinalis* и *Fumaria thuretii*. *Научни трудове - УХТ*, 60: 638-642.
- 55) Vrancheva, R., Marchev A., Ivanov I., **Georgiev V.**, Pavlov A. HPLC method for qualitative and quantitative analysis of mono- and disaccharides with refractive index detection. (2012). *Proceedings of IX-th Scientific – technical conference with international participation “Ecology and health’ 2012”*
- 56) Marchev A., Ivanov I., **Georgiev V.** Pavlov A. (2012): Determination of di- and triterpenes in *Salvia tomentosa* Mill. Cell suspension culture by high-performance liquid chromatography. *Scientific works of The University of Food Technologies*, 59: 229-233.

- 57) Marchev, A., Nikolova, M., **Georgiev, V.\***. (2011): Genetic transformation of *Salvia ringens* Sibth. et Sm. with *Agrobacterium rhizogenes* in two-phase submerged cultivation system. *Scientific works of The University of Food Technologies*, 58: 171-176.
- 58) Иванов, И., Берков, С., Илиева, М., **Георгиев, В.\*** (2011): Алкалоиден профил на shoot линия *Leucosium aestivum* LaR 28 при двуфазно култивиране в система с временно разбъркване тип RITA. *Научни трудове - УХТ*, 58: 165-170.
- 59) **Georgiev, V.\***, Ivanov, I. and Pavlov, A. (2010): Acetylcholinesterase inhibitory action of alkaloids extracts from *Galanthus elwesii* Hook. fil. *in vitro* systems. *Scientific works of The University of Food Technologies*, 57: 415-420
- 60) Иванов, И., Георгиев, М., **Георгиев, В.**, Илиева, М., Павлов, А. (2008): Двуфазни системи за биосинтез на галантамин: Адсорбционен капацитет на смолите Amberlite XAD. *Научни трудове - УХТ*, 55(1): 325-330.
- 61) Weber, J., **Georgiev, V.**, Pavlov, A., Ilieva, M. and Bley, Th. (2007): Flow cytometry investigations of *Datura innoxia*. *Scientific works of The University of Food Technologies*, 54(1): 431-436;
- 62) Georgiev, M., **Georgiev, V.**, Gocheva, T., Tuneva, D., Pavlov A., Ilieva, M. and Burrus, M. (2005): Optimization of nutrient medium composition for galanthamine biosynthesis by *Leucosium aestivum* shoot culture. *Scientific works of The University of Food Technologies*, 52(2): 311 – 315;
- 63) Pavlov, A, Georgiev, M., **Georgiev, V.**, Gocheva, T., Tuneva, D., Ilieva, M. and Burrus, M. (2005): Cultivation of *Leucosium aestivum* shoot cultures in bioreactor. *Scientific works of The University of Food Technologies*, 52(2): 305 – 310;
- 64) Berkov, S., Pavlov, A., **Georgiev, V.**, Stanimirova, P., Kovacheva, P. and Philipov, S. (2004): Alkaloid spectra of diploid and tetraploid plants and transgenic root cultures of *Datura stramonium*. *Annuaire de l'universite de Sofia "St. Kliment Ohridski" Faculte de formation d'educateurs et d'instituteurs*, 96(4): 95-98;

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**Общ импакт фактор: – 55.838**

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2016 г.

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