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№ \_\_\_\_\_

«18» December 2017

## Invitation Letter No.1

### *Dear colleagues!*

On behalf of M.I. Vavilov Society of Geneticists and Breeders of Ukraine (VSGBU) we are pleased to invite you to the **XIII International Scientific Conference «Factors in Experimental Evolution of Organisms»**, dedicated to the 100 years anniversary of the foundation of the National Academy of Sciences of Ukraine. The conference will take place on **September 17–21 2018** in the city of Yaremche (Ivano-Frankivsk oblast, Ukraine) at the “Arnika” educational and recreational center of Ivano-Frankivsk National Medical University located in a beautiful region of the Ukrainian Carpathians.

The scientific work of the Conference will be organized in the **following areas:**

1. **Genome Evolution in Nature and in Experiment**
2. **General and Population Genetics**
3. **Molecular Genetics and Plant Genomics**
4. **Applied Genetics and Breeding**
5. **Human Genetics and Medical Genetics**
6. **Analysis and Evaluation of Genetic Resources**
7. **Molecular and Cell Biotechnologies**
8. **Ecological Genetics**
9. **Bioinformatics and Protein Engineering**
10. **History of Biology, Teaching of Genetics, Breeding and Evolutionary Theory**

### INTERNATIONAL COMMITTEE OF THE CONFERENCE:

**Kunakh V.A.** – Dr. Biol. Sciences, Corresponding Member of the NAS of Ukraine, Kyiv, Ukraine (Chairman)

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**Volkov R.A.** – Dr. Biol. Sciences, Prof., Chernivtsi, Ukraine

**Volkova N.E.** – Dr. Biol. Sciences, Odessa, Ukraine

**Yemets A.I.** – Dr. Biol. Sciences, Corresponding Member of the NAAS of Ukraine, Kyiv, Ukraine

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**Koval'chuk L.E.** – Dr. Med. Sciences, Prof., Ivano-Frankivsk, Ukraine (Co- Chairman)

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**Humenyuk G.B.** – Ph.D., Ternopil

**Kozeretska I.A.** – Dr. Biol. Sciences, Kyiv

**Konvaliuk I.I.** – Ph.D., Kyiv

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**Morgun B.V.** – Ph.D., Kyiv  
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**Navrotska D.O.** – Junior Research Fellow, Kyiv  
**Nuzhyna N.V.** – Ph.D., Kyiv  
**Opalko A.I.** – Ph.D., Prof., Uman  
**Satarova T.M.** – Dr. Biol. Sciences, Prof., Dnipro

**Working languages:** Ukrainian, English, Russian.

All accepted materials will be published as a collection of academic papers «Factors in experimental evolution of organisms» (ISSN 2415-3826 (Online), ISSN 2219-3782 (Print)) prior to the beginning of the conference.

**This periodical is included into the List of specialized scientific periodicals of Ukraine in the field of biology (The Order of the Ministry of education and sciences of Ukraine of October 10, 2017 N1413) and to Index Copernicus database (ICV 2016 = 43,68).**

All materials presented to the conference as academic papers will be published in the periodical in original language (Ukrainian, English or Russian) only after prepayment. The publication fee, which is equivalent to **20 Euros for VSGBU members**, and **35 Euros for other participants**, must be paid before **March 1, 2018** into account of VSGBU: Kyiv, AT Raiffeisen Bank Aval MFO 380805, account 26001247064, EDRPOU (GCEO) 21 676 925 with an indication of **only the first author's surname**. Since society does not have a foreign currency account, foreign participants can transfer money to the treasurer of the Society (03680, Kyiv, Acad. Zabolotnogo str., 150, Institute of Molecular Biology and Genetics NAS of Ukraine for *Poronnik Oksana Oleksandrivna* on demand).

### **Guidelines for manuscript preparation**

1. Manuscripts presented for publication should be of 5–7 A4 size (297 x 210 mm) pages in length including tables, illustrations and abstract. Set page margins to 30 mm left, 20 mm others.

2. Font – Times New Roman, font size – 12 pt; single spaced; text justified, paragraph indent – 10 mm.

3. The text of the manuscript should begin with author(s) name (surname, initials), affiliation (institution), country, full address and e-mail address (12 pt, italics) – (see the example *below*).

4. After the affiliation(s) address, write e-mail and phone number of the corresponding author, 10 pt, *italics*. The corresponding author in the list of authors should be marked by a superscript symbol (✉) – (see the example *below*).

5. **Title** of the article should be short (not more than 120 symbols, including the spaces), accurately reflecting the article content.

6. **Manuscript** should be organized in the following order: abstract (without heading), introduction (without heading), materials and methods, results and discussions, conclusions, references.

7. **Abstract** has to include the following sections: “Aims”, “Methods”, “Results”, and “Conclusions” (see the example *below*). It should be at least 1000 and not exceed 1500 symbols with spaces and punctuation marks, including the article title and *key words* or *phrases* (not more than five).

8. **Abbreviations** should be defined at first mention and used consistently thereafter. For example, Carpathian biosphere reserve (CBR).

9. **Illustrations** (figures, photos, graphs etc.) must be embedded in text and also provided as separate **jpg** format files at 200–400 dpi at approximately the final size (Grayscale mode).

Lettering must be in 12pt Times New Roman, the same font must be used throughout all figures in the paper. Scale the figures to fit in the column width. Figure description must not be included in the image. The figures must be up to 80 mm (one column) or 180 mm wide (two columns) and not higher than 234 mm.

10. **Notes for tables** must be provided below the table, in 10 pt. Times New Roman font. For example,

*Note.* M – molecular mass marker.

*Notes:* \* callus-derived regenerants (primer A11), M – molecular mass marker.

11. **Information about financial support for the research and acknowledgements** should be included after the conclusions, in 10 pt. Times New Roman *italic* font.

12. **References.** Citations in the text must be in brackets. *For instance*, [1]. The list of references must be in the following format, and listed by the order of their appearance in the text. The list of used sources is made according to State Standard of Ukraine 8302:2015 and to the Ministry of Science and Education of Ukraine decree № 40 of 12.01.2017. After listing the sources in the original article language, the list must be provided in English, including the last names of the authors and the periodical name, as they are represented in the English version of the abstract or in the contents of the periodical. In the case when no English data about the publication are available, the names of the authors and the periodical must be transliterated into Latin alphabet according to the US Congress Library Standard, and the title of the paper – translated into English. One may use the following transliteration Internet-service: <http://translit.kh.ua/#ala>, with “ALA-LC” option selected in the “Standard” field. If a paper has a digital object identifier (DOI), it has to be included in the end of the reference.

The following files must be sent to the Organizing Committee to [factory2016@gmail.com](mailto:factory2016@gmail.com) e-mail address:

- The article text with figures and tables, as a Microsoft Word **.doc** or **.docx** file. The file name should consist of the first author’s last name in Latin letters and the number of the section. For example, *Bublyk\_1.doc* (here, the first author is Bublyk, section 1).
- Article layout with figures and tables in **.pdf**. The file name should consist of the first author’s last name in Latin letters and the number of the section. For example, *Bublyk\_1.pdf* (here, the first author is Bublyk, section 1).
- Images as separate files in color (for online-version) and grayscale (for printed version) in **.jpg**. The file name should consist of the first author’s last name and image number. For example, *Bublyk\_fig1.jpg* (first author Bublyk, figure 1).
- A scanned copy of payment receipt.

The **topic** of the e-mail must include the last name of the first author in English and the section number.

### Example of an article

**IVANOV O.M.<sup>1</sup>, SAFAROV I.O.<sup>1,2</sup>, NIKOLAIEV I.Yu.<sup>2</sup>**✉

<sup>1</sup> *Institute of Molecular Biology and Genetics of Natl. Acad. Sci. of Ukraine, Ukraine, 03680, Kyiv, Akad. Zabolotnogo str., 150, e-mail: [ivanov@imbg.org.ua](mailto:ivanov@imbg.org.ua)*

<sup>2</sup> *Yurii Fedkovych Chernivtsy National University, Ukraine, 58012, Chernivtsi, Kotsiubynskogo str., 2, e-mail: [nikolaev@gmail.com](mailto:nikolaev@gmail.com)*

✉ *[nikolaev@gmail.com](mailto:nikolaev@gmail.com), (050) 254-56-88, (097) 562-44-66*

[1 line]

**TITLE OF THE ARTICLE** (in BOLD CAPITALS)

[1 line]

Abstract (in the language of the paper, without heading)

Introduction (without heading)

**Materials and methods**

**Results and discussion**

**Conclusions**

Information about financial support, acknowledgements (if any, without heading).

[1 line]

**References**

[1 line]

Abstract in English (if English is not the language of the paper, without heading)

**Example of illustration**

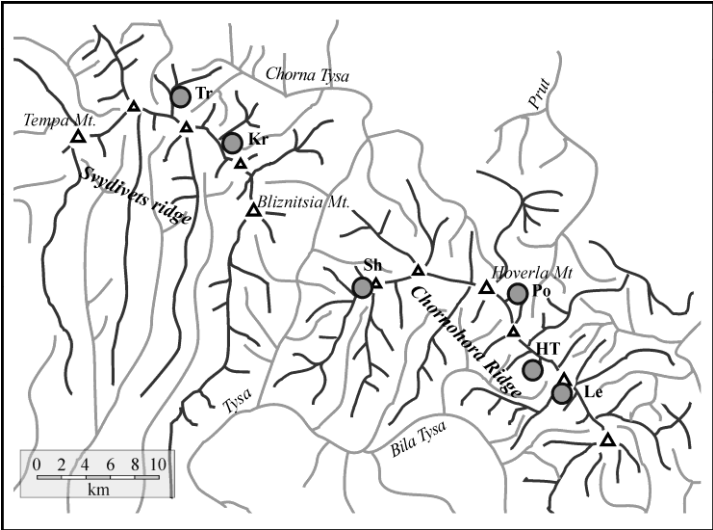


Fig. 1. Map of sampled populations of *G.lutea* in the Ukrainian Carpathians (represented by grayed circles). Kr – polonyna (mountain grassland) Krachuneska; Tr – the ridge slope between Troyaska and Tataruka Mountains; Sh – Sheshul and Pavlyk Mts.; Po – Pozhizhevska Mt.; HT – Hutyn Tomnatek Mt.; Le – polonyna Lemska.

**Example of table**

Table 1. Primers with the highest values of discriminating power ( $D_L$ ) selected for the use in population genetic studies of *G. lutea*

	Primer	Rp*	$D_L$ *	ND <sub>30</sub>	Nt**	ND <sub>86</sub> estimated	ND <sub>86</sub> experimental
1	UBC#807	11.9	0.967	0	32	0	4
2	UBC#811	12.3	0.964	1	38	8.4	3
3	A18	7.7	0.956	5	21	42.0	52
4	UBC#840	7.2	0.953	5	23	50.4	21
5	A07	5.4	0.953	6	26	50.4	24
6	UBC#889	8.7	0.953	7	26	50.4	20
7	UBC#835	4.7	0.951	7	25	58.8	16
8	ERF-F	9.1	0.949	8	23	67.2	56
9	MYB	7.7	0.949	8	22	67.2	106
10	1962	6.1	0.949	8	17	67.2	58
11	B01	5.5	0.944	10	20	84.0	34
12	A19	7.3	0.942	11	18	70.2	28

Notes: \* – value calculated for the sample of plants of two populations (n = 30); \*\* – value calculated for the sample of plants of six populations (n = 86).

## Example of abstract

**IVANOV O.M.<sup>1</sup>, SAFAROV I.O.<sup>1,2</sup>, NIKOLAIEV I.Yu.<sup>2</sup>**

<sup>1</sup> Institute of Molecular Biology and Genetics of Natl. Acad. Sci. of Ukraine, Ukraine, 03680, Kyiv, Akad. Zabolotnogo str., 150, e-mail: ivanov@imbg.org.ua

<sup>2</sup> Yurii Fedkovych Chernivtsy National University, Ukraine, 58012, Chernivtsi, Kotsiubynskogo str., 2, e-mail: nikolaev@gmail.com

[1 line]

### **COMPREHENSIVE EVALUATION OF *IRIS PUMILA* L. POPULATIONS STATUS IN UKRAINE**

**Aim.** *Iris pumila* L. (Iridaceae), typical steppe xerophyte, which is protected in several regions of Ukraine. Area of the species range has suffered a significant decline and fragmentation over the recent centuries. The comprehensive population studies were conducted to elucidate the effects of these processes and determine the indices that can be used as well-timed signals of species extinction risk. **Methods.** Ecological and population studies were combined with ISSR-analysis of genetic diversity to characterize the populations of *I. pumila*. **Results.** A number of population and ecological indicators suggests that *I. pumila* in Ukraine may be referred to regressive species threatened by genetic erosion. Moreover, the results of ISSR-analysis of plants from four populations in Mykolayiv and Poltava regions showed relatively high levels of the species genetic diversity and weak divergence of isolated populations. **Conclusions.** The reduction and fragmentation of *I. pumila* habitat first of all is accompanied by decline in ecological and population indicators, but depletion of the populations' gene pool occurs much slower. To adequately determine the risk of genetic erosion in particular species, apart from assessment of population and ecological indicators, evaluation of species genetic resources using molecular markers is needed.

**Keywords:** genetic resources, *Iris pumila* L., population studies, PCR markers, threatened species.

## Examples of references

- **Articles:** Gamelin F.X., Baquet G., Berthoin S., Thevenet D., Nourry C., Nottin S., Bosquet L. Effect of high intensity intermittent training on heart rate variability in prepubescent children. *Eur. J. Appl. Physiol.* 2009. V. 105. P. 731–738. doi: 10.1007/s00421-008-0955-8.
- **Books:** Sokal R.R., Rohlf F.J. Biometry. New York: W.H. Freeman and company, 1995. 850 p.
- **Abstracts:** Morgun B.V., Bannikova M.O., Fedorenko T.V., Markovskiy O.V., Vlasova O.M., Kuchuk M.V. Worldwide spreading and identification of transgenic *Z. mays* in Ukraine. *Modern Aspects of Plant Genetic Engineering*: abstract of International Scientific Conference (Kiev, May 30 – June 1, 2011). Kiev, 2011. P. 48.
- **Digital Sources** are listed in original language.  
Guerra F.P., Wegrzyn J.L., Sykes R., Davis M.F., Stanton B.J., Neale D.B. Association genetics of chemical wood properties in black poplar (*Populus nigra*). *New Phytol.* 2013 V. 197 (1). P. 162–176. doi: 10.1111/nph.12003. URL: <https://www.ncbi.nlm.nih.gov/pubmed/23157484> (last accessed: 17.12.2017).
- **Patents:** Drobyk N.M., Melnyk V.M., Hrytsak L.R., Leskova O.M., Kunakh V.A. Method of microclonal multiplication of *Gentiana lutea* L. and *Gentiana acaulis* L.: Patent for utility model 21499 Ukraine. № u200610671; applied on 09.10.2006, published on 15.03.2007, bulletin № 3.
- **Dissertation abstract:** Novosad I.Y. Technological procurement for manufacture of sections of working attachments of screw conveyors: dissertation abstract of Candidate of Technological Sciences. Ternopil, 2007. 20 p.

- **Dissertation:** Spiridonova K.V. Study of peculiarities of genome variability of *Rauwolfia serpentina* Benth cultivated cells: dissertation of Candidate of Biological Sciences. Kyiv, 2000. 149 p.

**Additional reference examples** can be found at the following link:  
<http://utgis.org.ua/images/pdf/examples.pdf>

**Manuscripts received after March 1<sup>st</sup>, 2018, or not formatted according to the guidelines (see above) will not be accepted! Please check all the materials before sending.**

**Address for correspondence:** email: [factory2016@gmail.com](mailto:factory2016@gmail.com) . Please carefully check the address you send the materials to!

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Next Information letter will be sent in June 2018.

The information letter will be send only to the **email addresses provided by the authors** in the submitted manuscripts.

If you are planning to participate in the conference without publishing any materials (such as a lecture), please inform the Organizing Committee about this by sending an e-mail to [factory2016@gmail.com](mailto:factory2016@gmail.com) or on one of the phones listed above.