

# ABSTRACT BOOK II



**IBC 2017**  
XIX International Botanical Congress  
Shenzhen China

## Posters and Abstracts

---

### **XIX International Botanical Congress**

Shenzhen Convention & Exhibition Center

July 23-29, 2017

### **Nomenclature Section**

Peking University HSBC Business School

July 17-21, 2017



## 2. Institute of Environmental Biology, University of Wrocław

*Juncus quartinianus* was described by A. Richard in 1851 from Ethiopia. Type specimens were collected by R. Quartin-Dillon and A. Petit in Chiré (Ethiopia) in July 1844. Richard distinguished this species on the basis of the following features: sessile, lateral single head, lanceolate, acute, subcastaneous tepals, and the inner ones slightly longer than the outer, six stamens one-third as long as the tepals and pyramidal capsules longer than the perianth. Later authors have treated this taxon as a synonym of *J. fontanesii* J. Gay ex Laharpe or *J. oxycarpus* E. Mey. ex Kunth. According to the latest available monograph of the Juncaceae family, specimens of *J. oxycarpus* from Ethiopia and Eritrea, that were initially classified as *J. fontanesii*, have longer capsules and are similar to *J. fontanesii* subsp. *pyramidatus* (Laharpe) Snogerup. Indeed, in the course of studying the herbarium material of *J. oxycarpus* and *J. fontanesii* subsp. *pyramidatus*, we found some unusual specimens from Ethiopia, Eritrea and Somalia. These were previously identified mainly as *J. oxycarpus*, but differ in their capsules that are longer than the perianth and their quite different seed coat surface. Some specimens were initially classified as *J. fontanesii*: however, we found that they do not belong to the latter species as their anthers are shorter than the filaments or rarely, the anthers and filaments are equally sized (anthers of *J. fontanesii* are distinctly longer than filaments). Our detailed morphological analyses of flowers, fruit and seeds show that these specimens represent a distinct species from both these taxa. After careful analysis of the literature and herbarium material, it was found that this species was named *Juncus quartinianus* A. Rich., 1851 and thus we proposed to restore this name. In addition, revision of the herbarium material revealed that Richard's description of this species is inaccurate and it has been corrected. "The project was supported by the Leading National Research Centre (KNOW) programme of the Wrocław Center of Biotechnology for years 2014-2018"

## T2

## P0573

Epitypification of the J. E. Smith's Name *Epipactis purpurata* (Orchidaceae, Neottieae)

Anna Jakubska-Busse<sup>1</sup>, Elżbieta Żołubak<sup>1</sup>, Jarosław Proćków<sup>2</sup>

1. Institute of Environmental Biology, University of Wrocław

2. Institute of Biology, Wrocław University of Environmental and Life Sciences

The identity of the holotype of *Epipactis purpurata* Sm. is shown to be demonstrably ambiguous. The specimen is not representative for identification because all its flowers are at the budding stage (pre-anthesis) – thus it is not possible to identify the specimen (holotype) to species based on the recently analyzed features (i.e. gynostemium and floral segments morphology, especially details of the lip). The taxon has been misidentified many times due to its resemblance to some forms of morphologically variable *E. helleborine* (L.) Crantz, which we discovered based on the analysis of herbarium materials from different herbaria (BR, BRNU, FR, G, KTU, M, MA, S, STU, WRSL, ZT, Z). Many plants of *E. helleborine* can have similar combinations of features like the holotype of *E. purpurata* (i.e., robust stem even in the inflorescence and a small leaves). Considering this ambiguity, an epitype for the name is proposed (M 257866) in order to enable its precise taxonomic

## T2

## P0572

*Juncus quartinianus* A. Rich. (Juncaceae, sect. *Ozophyllum*), a Neglected Species from Ethiopia, Eritrea and Somalia

Anna Faltyn<sup>1</sup>, Anna Jakubska-Busse<sup>2</sup>, Paweł Jarzembowski<sup>2</sup>, Jarosław Proćków<sup>1</sup>

1. Institute of Biology, Wrocław University of Environmental and Life Sciences

interpretation. The proposed epitype is composed of two ramets (two shoots) at the full flowering stage. The flowers are wide open, which allows to perform biometric measurements or to look at the details of sepal and petal morphology as well as the lip. *Epipactis purpurata* is the important James Edward Smith's name because the orchid is widely distributed in western and central Europe. "The project was supported by the Leading National Research Centre (KNOW) programme of the Wrocław Center of Biotechnology for years 2014-2018".

## T2

### P0574

#### **New characters useful in determination of *Epipactis purpurata* Sm. s.str. (Orchidaceae, Neottieae) based on the analysis of herbarium material and field research data**

Anna Jakubská-Busse<sup>2</sup>, Elżbieta Żotubak<sup>1</sup>, Paweł Jarzembowski<sup>1</sup>, **Jarosław Proćków<sup>2</sup>**

1. Institute of Environmental Biology, University of Wrocław

2. Institute of Biology, Wrocław University of Environmental and Life Sciences

The genus *Epipactis* is a difficult and controversial taxon due to its wide but poorly recognized range of phenotypic variability (particularly ontogenetic), which impedes proper identification of the species. The available determination keys do not allow to identify the plants in the pre-flowering and fruiting stages, but only in open flowers. New reports on describing new species of the *Epipactis* genus, e.g. from Iberian Peninsula or Crimea made us undertake studies on revision of the range of variability of *Epipactis purpurata* Sm. Our detailed analysis of the herbarium collections on loan (BR, C, FR, G, K, KTU, M, S, STU, Z, ZT) and field investigations (Poland, Czech Republic and Slovakia) showed that they still contain numerous erroneously identified specimens. An important character in identification of *E. purpurata* is the colour of the shoot, dark-green to magenta in nature, sometimes purplish, rarely green. It must be, however, remembered that the drying method may influence the retention of colour. The aim of our project was to demonstrate full variability of *E. purpurata* Sm. *sensu stricto* and compare it with previous studies. We established new ranges of morphological character variability for the taxon, including diagnostically significant features. The variability refers to flower features, i.e. the shape and pigmentation of the lip, sepals and petals, also the shape and size of the gynostemium as well as the size, shape and colouration of leaves, which, in turn, makes it difficult to determine the diagnostic features for the species. The detailed morphological and anatomical studies of leaf characters, including the shape and size of papillae, confirmed that this feature should be carefully considered in taxa identification as we present different types of papillae in examined specimens. "The project was supported by the Leading National Research Centre (KNOW) programme of the Wrocław Center of Biotechnology for years 2014-2018"