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TAXONOMIC COMPOSITION AND CHANGES IN SYSTEM OF *AMELANCHIER* MEDIK. GENUS

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A brief history of studying *Amelanchier* Medik. genus is represented in a retrospective discourse. Besides, the analysis of current state of its taxonomic and systematic studies. The reasons that complicate the identification of plants, as well as the structure of the genus system, are defined. The most convenient taxonomic features of the genus are named. The controversial issues of the genus system are discussed, based on the classical, molecular and genetic positions. The analysis of the available publications and electronic databases on the taxonomy of species *Amelanchier* enabled us to state their ambiguous interpretation and, in effect, reduce the number of recognized species of the excepted status in the genus composition. We can assume that the revealed tendencies concerning the clarifying status of the species indicate the change of views on the taxonomy of the Juneberry. In terms of the concept of the species, its converted rank as a monotypic species to the polytypic (monophyletic) species is evident with the smallest number of distinctive features. A more thorough study shows manifestation of the species variability in its process of adaptation to environmental factors. Differences on species and intraspecies classification of the genus found in various publications point to incompleteness of its system and the necessity for further research using both modern and traditional methods.

Keywords: ahamospecies, DNA sequence, microspecies, subfamily, tribe Maleae.

INTRODUCTION

The *Amelanchier* Medik. (Juneberry) genus is considered to be complicated for identifying plants by themselves, and for genus system construction [14]. Difficulties related to its study are connected first of all with morphological variation of features of vegetative and generative organs [14], a large number of divergent and intermediate forms [3], polyploidy, spontaneous hybridization and detected just recently [5] a tendency to apomixis causing so-called occurring agamospecies [6] which determines some taxonomic difficulties.

One of the first reccords about Juneberry dates back to the year 1581 [17]. Before singling out *Amelanchier* as a separate genus in 1789 by Friedrich Casimir Medicus [18], Joseph Pitton de Tournefort [28] and Carl Linnaeus[16] reffered its species to the genus *Mespilus*, though first Linnaeus defined its place in the genus *Chionanthus* [15].

As a monograph of George Neville Jones mentions [14], during the following taxonomic revisions, its representatives were united under many generic names, including as a separate genus: *Amelanchus* Rafinesque (1834), Merrill (1942); *Amelancus* Rafinesque, Fl. Tellur. (1836) [1837], F. Mueller ex Vollmann (1914); *Amelancher* Bub. Fl. Pyren. (1900) and as separate representatives within the genera: *Aronia* (1807, 1818, 1821, 1836); *Crataegus* (1783, 1797); *Malus* (1825); *Mespilus* (1753, 1767, 1768, 1774, 1787, 1790, 1803, 1810, 1818, 1834, 1859) and *Pyrus* (1781, 1787, 1793, 1796, 1799, 1803, 1809, 1813, 1814, 1824, 1825, 1838), but the clear position of *Amelanchier* is caused by the morphological features of its leaves (being its most variable feature, it is dependent on the condition of the vegetation, the period of the growing season and its ontogeny), its multifloral racemous buds and flowers, and fruits with special leathery carpels – each of which have incomplete membranes starting from the back wall (this feature is observed only in two genera of the family Rosaceae – *Peraphyllum* Nutt. and *Malacomeles* (Decne.) Engl.).

Taking into consideration the mentioned taxonomic difficulties, the aim of our research was to specify the taxonomic composition of the genus *Amelanchier* representatives, and to analyze current views on the systematic position of these plants in the genus system and make lists of their synonymous names.

MATERIALS AND METHODS

Taking into account the data obtained from analyzing the experimental and theoretical studies performed in different countries of the world over a long historical period by scientists from different scientific schools [1; 4; 8; 10; 11; 14–16; 21], the attempt to generalize available information is made. In addition, the method of group selection was applied, which allowed the dispelling of dubious publications using citing criteria in peer-reviewed publications and giving priority to research that is carried out by international programs. In the process of preparing the article, works on the domestication of the genus *Amelanchier* and their nearest families published in different years, were analyzed, summarized and supplemented with their own experiences [1; 4; 20–23; 30].

RESULTS AND DISCUSSION

The *Amelanchier* genus in classical phylogenetic, as well as in the molecular phylogenetic (cladistic) classification system of plants, is defined as a component of the family Rosaceae Juss. of the range Rosales Bercht. et J.Presl. [2; 10; 25].

The family Rosaceae is quite a large family of angiosperms, comprising about 90–110 genera and 2000–4828 species [8; 11; 26; 27], which averages about 100 genera and 3000 species [23].

Numerous “microspecies” are distinguished in many genera of Rosaceae, morphological differences between which are slight (for example, details of pubescence), but they are considered stable. Microspecies appear in groups where free interbreeding in populations is limited because of apomixis spread or other reasons. Therefore, if counting microspecies, the number of Rosaceae species can significantly increase [27].

Traditionally, on the basis of differences, mainly in fruit morphology and in basic chromosome numbers, the family Rosaceae were separated into 4 subfamilies: Spiraeoideae (Meadowsweet) – fruit – follicles, rarely capsule, basic chromosome numbers 8 and 9; Rosoideae (Rose) – fruit – hip, aggregate fruit, aggregate-accessory fruit, the hypanthium often takes part in the fruit formation, basic chromosome numbers 7, 9,

rarely 8; Maloideae (Apple) – fruit – pome, basic chromosome number 17; Prunoideae (Plum) – fruit – drupelet, basic chromosome number 8 [11]. The other authors, depending on the occurrence of stipules, calyx structure, hypanthium, gynoecium, fruit, and other signs in the family Rosaceae distinguish from 3 to 12 subfamilies [8].

The genus *Amelanchier,* since the times of Adolf Engler (1903), was defined within the subfamily Pomoideae (later Maloideae) [10]. Formed at the beginning of the last century [24], synopsis of the genera of the subfamily Maloideae as a part of the family Rosaceae with certain deviations [29] in his near-classical state is supported by many authors [1; 22]. However, more evidence is provided concerning the revision of the family Rosaceae appropriateness on regrouping subfamilies, supertribes, tribes, subtribes, some particular genera and species with the simultaneous elimination of the subfamily Maloideae [4; 9; 23].

The revision of the family Rosaceae was supported by Armen Takhtajan, who suggested a new version of flowering plant systems, revised according to the latest results of molecular phylogenetics in the book “Flowering Plants” reissued in 2009 [25].

Armen Takhtajan highlights the subfamily Pyroideae (formerly Maloideae) in the family Rosaceae, combining in it 27 genera in 4 tribes, defining the genus *Amelanchier* among the families of the tribe Maleae.

According to the analysis of the subfamilies from the family Rosaceae, performed by a group of scholars of different universities in the USA, Canada and Sweden after six nuclear (18S, gbssi1, gbssi2, ITS, pgip, ppo) and four chloroplastic (matK, ndhF, rbcL, and trnL-trnF) segments of DNA sequences [4; 9; 23], only the subfamily Rosoideae (Juss.) Arn. turned out monophyletic, with the basic chromosome number $x = 7$ or 8, except for the tribe Dryadeae ($x = 9$). Instead, the subfamilies Prunoideae and Maloideae in the traditional sense were paraphyletic, and Spiraeoideae – polyphyletic group. On this basis, the rank of the first two subfamilies is proposed to reduce to the tribe and together with the other related tribes to combine into one monophyletic (in a very broad sense) subfamily Spiraeoideae C. Agardh, with $x = 8, 9, 15$ or 17. Therefore, the supertribe Pyrodae Camp., Ev., Morg. et Dick. with the tribe Pyreae Baill. were included into the subfamily Spiraeoideae ($x = 17$, with the exception of the genus *Vauquelinia* Correa ex Humb. Et Bonpl. with $x = 15$), the subtribe of which Pyrinae absorbed most of the genera of the subfamily Maloideae, including the genus *Amelanchier*.

This extension of the subfamily Spiraeoideae enabled us to determine the systematic position of the genus *Amelanchier* within the family Rosaceae as follows [4]: Familia – Rosaceae Juss.; Subfamilia – Spiraeoideae C. Agardh; Supertribus – Pyrodae Camp., Ev., Morg. et Dick.; Tribus – Pyreae Baill.; Subtribus – Pyrinae Dumort.; Genus – *Amelanchier* Medik.

However, due to the Melburnian Code, the current variant of the International Code of Nomenclature for algae, fungi, and plants [13], the priority name for the subfamily, which combines Spiraeoideae, Maloideae and Amygdaloideae is the name Amygdaloideae; for the tribe Pyreae – name Maleae Small; for the subtribe Pyrinae – name Malinae Rev. (Article 19.5, ex. 5). This is a reason to define the genus *Amelanchier* among the corresponding groups.

While comparing the systematic position of the genus *Amelanchier*, according to the different classification systems of plants, different in time of creation and research level, the relative stability of the placement of the genus *Amelanchier* can be observed within major taxa of higher ranks (Table 1).

Table 1. **Systematic position of *Amelanchier* genus according to different plant classification systems**

Таблиця 1. **Систематичне положення роду *Amelanchier* за різними системами класифікації рослин**

Taxon	Classification systems of plants		
	Engler, 1903 [10]	Takhtajan, 2009 [25]	APG III, 2009 [2; 12].
Division	Embryophyta siphonogama	Magnoliophyta	–
Subdivision	Angiospermae	–	–
Classis	Dicotyledoneae	Magnoliopsida (Dicotyledons)	–
Subclassis	Archichlamydeae	Rosidae	–
Superordo	–	Rosanae	–
Ordo	Rosales	Rosales	Rosales
Subordo	Rosineae	–	–
Familia	Rosaceae	Rosaceae	Rosaceae
Subfamilia	Pomoideae	Pyroideae (Maloideae)	Amygdaloideae
Tribus	–	Maleae	Maleae
Subtribus	–	–	Malinae
Genus	*Amelanchier*	*Amelanchier*	*Amelanchier*

We find it appropriate to consider the systematic position of the genus *Amelanchier* according to the A. L. Takhtadzhyan system (2009) [25], arguing such a position because this system takes into account the latest results of molecular phylogenetic studies, yet reveals and demonstrates those obvious synapomorphies, morphological or other features that unite or divide taxa of different ranks, and which takes note of some aspects of the analysis of the main features of modern angiosperm phylogenetic systems that were suggested by S. L. Mosyakin [19].

Until recently it was considered that the genus *Amelanchier* comprises about 25–33 species [22; 30]. Herewith the number of species names used by different authors is nearly ten times as much. Most of these names are now considered unresolved (semi- and/or temporarily accepted), synonyms, intraspecies taxa or interspecific hybrids [7; 26].

Here is a list of the names of 33 species plants of the genus *Amelanchier* according to the subfamily Maloideae (Rosaceae) checklist, 1990 [22]: *A. alnifolia* (Nutt.) Nutt.; *A. arborea* (Michx. f.) Fern.; *A. asiatica* (Sieb. & Zucc.) Endl. ex Walp.; *A. australis* Standl.; *A. bakeri* Greene; *A. bartramiana* (Tausch) Roem.; *A. canadensis* (L.) Medikus; *A. covillei* Standl.; *A. cretica* (Willd.) DC; *A. cusickii* Fern.; *A. fernaldii* Weig.; *A. florida* Lindl.; *A. gaspensis* Fern. & Weatherby; *A. humilis* Wieg.; *A. integrifolia* Boiss. & Hohen; *A. interior* Niels.; *A. intermedia* Spach; *A. laevis* Wieg.; *A. lamarckii* F.-N. Schroeder; *A. mormonica* Schneider; *A. obovalis* (Michx.) Ashe; *A. oreophila* Niels.; *A. ovalis* Medikus; *A. pallida* Greene; *A. parviflora* Boiss.; *A. polycarpa* Greene; *A. pumila* Nutt.; *A. sanguinea* (Pursh) DC.; *A. sinica* (Schneider) Chun; *A. spicata* (Lam.) K. Koch; *A. stolonifera* Wieg.; *A. utahensis* Koehne; *A. wiegandii* Niels.

Besides, the speices: *A. grandiflora* (Wieg.) Wieg.; *A.* × *grandiflora* Rehder; *A.* × *neglecta* Egglest. ex G. N. Jones; *A. paniculata* Rehder; *A.* × *quinti-martii* Louis-Marie; *A.* × *turkestanica* Litw. — marked as deleted from this list [22].

Summarized data on the taxonomy of the genus *Amelanchier*, presented by scientists of the Royal Botanic Gardens in Kew (UK) and the Missouri Botanical Garden (USA) (The Plant List..., 2013) combine together 243 species name of this genus representatives. Of them, 28 have acquired an accepted status (11.5 %), the rest is considered synonymous — 122 (50.2 %) and unassessed — 93 (38.3 %). Besides, 89 names of infraspecific names are included to this list, which increases the number of accepted species to 37 (11.1 %), synonyms to 197 (59.3 %) and unassessed to 98 (29.5 %) [26].

Here is a list of the names of 28 species and 9 infraspecific taxa of plants belonging to the genus *Amelanchier* of the accepted status according to The Plant List.., 2013 [26]: *A. alnifolia* (Nutt.) Nutt. ex M. Roem. (*A. alnifolia* var. *humptulipensis* (G. N. Jones) C. L. Hitchc., *A. alnifolia* var. *semi-integrifolia* (Hook.) C. L. Hitchc.); *A. arborea* (F. Michx.) Fernald (*A. arborea* var. *alabamensis* (Britton) G. N. Jones, *A. arborea* var. *austromontana* (Ashe) H. E. Ahles, *A. arborea* f. *nuda* (E. J. Palmer & Steyerm.) Rehder); *A. asiatica* (Siebold & Zucc.) Endl. ex Walp.; *A. australis* Standl.; *A. bakeri* Greene; *A. bartramiana* (Tausch) M. Roem.; *A. canadensis* (L.) Medik.; *A. covillei* Standl.; *A. cretica* (Willd.) DC.; *A. cusickii* Fernald; *A.* × *grandiflora* Rehder; *A. interior* E. L. Nielsen; *A.* × *intermedia* Spach; *A. laevis* Wiegand; *A. lamarckii* F. G. Schroed.; *A.* × *neglecta* Eggl. ex G. N. Jones; *A. obovalis* (Michx.) Ashe; *A. ovalis* Medik.; *A. pallida* Greene; *A. parviflora* Boiss.; *A. pumila* (Nutt. ex Torr. & A. Gray) M. Roem.; *A.* × *quinti-martii* Louis-Marie; *A. sanguinea* (Pursh) DC. (*A. sanguinea* var. *gaspensis* Wiegand, *A. sanguinea* var. *grandiflora* (Wiegand) Rehder); *A. sinica* (C. K. Schneid.) Chun; *A. spicata* (Lam.) K. Koch; *A. stolonifera* Wiegand (*A. stolonifera* f. *micropetala* (B. L. Rob.) Rehder); *A. turkestanica* Litv.; *A. utahensis* Koehne (*A. utahensis* var. *covillei* (Standl.) N. H. Holmgren).

Scientists of the Royal Botanic Gardens in Kew (UK) offer updated (as of March 2015) data on the taxonomy of the genus *Amelanchier* (Catalogue of Life., 2015). Thus, the total number of representatives of species names involved in this kind of analysis is 156 (96 species and 60 infraspecific taxa). However, among them 38 titles (24.4 %) are recognized – 23 species and 15 infraspecific taxa names. Instead, 118 (75.6 %) are considered synonymous – 73 species and 45 infraspecific taxa names. Among the species synonymous, 54 species are accepted and 19 are ambiguous; among the synonyms of the infraspecific rank, 42 are accepted and 3 are ambiguous [7].

The list of the mentioned accepted names of the 23 species and 15 infraspecific taxa of plants of the genus *Amelanchier* of the adopted status according to the Catalogue of Life., 2015 [7] include the following: *A. alnifolia* (*A. alnifolia* subsp. *alnifolia*, *A. alnifolia* var. *cusickii* (Fern.) C. L. Hitchc., *A. alnifolia* var. *humptulipensis* (G. N. Jones) C. L. Hitchc., *A. alnifolia* var. *semiintegrifolia* (Hook.) C. L. Hitchc.); *A. arborea* (Michx. f.) Fern. (*A. arborea* var. *alabamensis* (Britt.) G. N. Jones, *A. arborea* var. *austromontana* (Ashe) Ahles); *A. asiatica* (Sieb. & Zucc.) Endl. ex Walp.; *A. bartramiana* (Tausch) M. Roemer; *A. canadensis* (L.) Medicus; *A. grandiflora* Rehd.; *A. humilis* Wiegand; *A. interior* Nielsen; *A. intermedia* Spach; *A. laevis* Wieg.; *A. nantucketense* E. P. Bickn.; *A. neglecta* Egglest. ex G. N. Jones; *A. obovalis* (Michx.) Ashe; *A. ovalis* (*A. ovalis* subsp. *cretica* (Willd.) Maire & Petitm., *A. ovalis* subsp. *integrifolia* (Boiss. & Hohen.) Bornm., *A. ovalis* subsp. *ovalis*, *A. ovalis* var. *libanotica* Browicz); *A. pallida* Greene; *A. parviflora* (*A. parviflora* subsp. *chelmea* (Halacsy) J. Zielinski, *A. parviflora* subsp. *dentata* (Browicz) K. I. Chr., *A. parviflora* subsp. *parviflora*); *A. pumila* (Torr. & A.Gray) Nutt. ex M.Roem.; *A. quinti-martii* Lalonde; *A. sanguinea* (Pursh) DC. (*A. sanguinea* var. *gaspensis* Wieg.); *A. sinica* (C. K. Schneid.) Chun; *A. stolonifera* Wiegand; *A. turkestanica* Litwinow; *A. utahensis* Koehne (*A. utahensis* var. *covillei* (Standl.) N. H. Holmgren).

The analysis of the available lists of plants, which belonged to the genus *Amelanchier* at various times, demonstrates their ambiguous interpretation and shows the general tendency for thorough review of their status.

The dynamics of this process is well illustrated by a comparative list of the names of species of the genus *Amelanchier* of the accepted status according to the checklists of the subfamily Maloideae (Rosaceae), 1990 [22] lists The Plant List., 2013 [26] and the Catalogue of Life., 2015 [7] (Table 2).

Table 2. **List of species of *Amelanchier* genus checklists according to different plant lists**

Таблиця 2. **Перелік видів представників роду *Amelanchier* за різними контрольними списками рослин**

A checklist., 1990 [22]	The Plant List., 2013 [26]	Catalogue of Life., 2015 [7]
A. alnifolia	*A. alnifolia*	*A. alnifolia*
A. arborea	*A. arborea*	*A. arborea*
A. asiatica	*A. asiatica*	*A. asiatica*
A. australis	*A. australis*	*(s. for *A. utahensis*)
A. bakeri	*A. bakeri*	*(s. for *A. utahensis*)
A. bartramiana	*A. bartramiana*	*A. bartramiana*
A. canadensis	*A. canadensis*	*A. canadensis*
A. covillei	*A. covillei*	*(s. for *A. utahensis* var. *covillei*)
A. cretica	*A. cretica*	*(s. for *A. ovalis* subsp. *cretica*)
A. cusickii	*A. cusickii*	*(s. for *A. alnifolia* var. *cusickii*)
A. fernaldii	*(the name has an unassessed status)	*(s. for *A. canadensis*)
A. florida	*(s. for *A. alnifolia* var. *semi-integrifolia*)	*(s. for *A. alnifolia* var. *semiintegrifolia*)
A. gaspensis	*(s. for *A. sanguinea* var. *gaspensis*)	*(s. for *A. sanguinea* var. *gaspensis*)
**	*	*A. grandiflora*
A. humilis	*(s. for *A. spicata*)	*A. humilis*
A. integrifolia	*(s. for *A. rotundifolia* subsp. *integrifolia*)	*(s. for *A. ovalis* subsp. *integrifolia*)
A. interior	*A. interior*	*A. interior*
A. intermedia	*	*A. intermedia*
A. laevis	*A. laevis*	*A. laevis*
A. lamarckii	*A. lamarckii*	*
A. mormonica	*(s. for *A. utahensis*)	*(s. for *A. utahensis*)
*	*(s. for *A. nantucketensis*)	*A. nantucketense*
*	*	*A. neglecta*
A. obovalis	*A. obovalis*	*A. obovalis*
A. oreophila	*(s. for *A. utahensis*)	*(s. for *A. utahensis*)
A. ovalis	*A. ovalis*	*A. ovalis*
A. pallida	*A. pallida*	*A. pallida*
A. parviflora	*A. parviflora*	*A. parviflora*
A. polycarpa	*(s. for *A. pumila*)	*(s. for *A. pumila*)
A. pumila	*A. pumila*	*A. pumila*
**A. paniculata*	*(the name has an unassessed status)	*(s. for *Malacomeles paniculata* (Rehd.) J.B. Phipps)
*	*	*A. quinti-martii*
A. sanguinea	*A. sanguinea*	*A. sanguinea*

The end of the Table 2

A. sinica	*A. sinica*	*A. sinica*
A. spicata	*A. spicata*	*(ambiguous s. for *A. humilis*)
A. stolonifera	*A. stolonifera*	*A. stolonifera*
*	*A. turkestanica*	*A. turkestanica*
A. utahensis	*A. utahensis*	*A. utahensis*
A. wiegandii	*(s. for *A. interior*)	*(s. for *A. interior*)
**	*A. × grandiflora*	*
*	*A. × intermedia*	*
**	*A. × neglecta*	*
**	*A. × quinti-martii*	*
***A. × turkestanica*	*	*

Comments: * – species name is missing in the list; ** — species name is removed from the list; s. — synonym of the accepted species name.

Примітки: * – видової назви у списку немає; ** – видова назва видалена зі списку; s. – синонім визнаної видової назви.

It can be mentioned reducing the number of species of the accepted status in the genus *Amelanchier* composition, due to its specification (change), and the transfer of certain species names of species rank to the rank of infraspecific taxon or synonym with accepted or unresolved status.

However, 16 species with fairly stable status are distinguished from the suggested list, including: *A. alnifolia*; *A. arborea*; *A. asiatica*; *A. bartramiana*; *A. canadensis*; *A. interior*; *A. laevis*; *A. obovalis*; *A. ovalis*; *A. pallida*; *A. parviflora*; *A. pumila*; *A. sanguinea*; *A. sinica*; *A. stolonifera*; *A. utahensis*. Seven species that until recently did not have the status of species or were determined in the status of synonyms, such as: *A. grandiflora*; *A. humilis*; *A. intermedia*; *A. nantucketense*; *A. neglecta*; *A. quinti-martii*; *A. turkestanica* – acquired the status of species. Six species that, until recently, had the status of species, namely: *A. australis*; *A. bakeri*; *A. covillei*; *A. cretica*; *A. cusickii*; *A. spicata* – acquired the status of synonyms. Nine species that have lost the status of species and were recently reduced to the status of a synonym, comparatively, namely: *A. fernaldii*; *A. florida*; *A. gaspensis*; *A. integrifolia*; *A. mormonica*; *A. oreophila*; *A. polycarpa*; *A. paniculata*; *A. wiegandii* – confirmed the status of the synonymous names. One species and five hybrids, namely: *A. lamarcki*; *A. × grandiflora*; *A. × intermedia*; *A. × neglecta*; *A. × quinti-martii*; *A. × turkestanica* – were not included to mentioned final lists [7, 22].

CONCLUSION

Concerning relative stability of the placement of *Amelanchier* representatives within the main taxa of higher rank, the place of the genus within the particular subfamily, namely: within the subfamily Pyroideae (former Maloideae) or in the subfamily Amygdaloideae, uniting former subfamilies Amygdaloideae, Spiraeoideae and Maloideae, remains debatable.

Tendencies concerning specifying the status of the species that once belonged to the genus *Amelanchier*, indicate changing views on the taxonomy of the Juneberry in the perspective of a certain concept, in particular the transition from monotypic to polytypic species concept, when a certain amount (one-two) of distinctive features, at a more detailed study, are the manifestation of variability in the species to adapt to environmental factors.

Differences on species and interspecies classification of *Amelanchier* genus representatives were found in various publications. They indicate the incompleteness of genus system and the necessity for further studies using both the newest (molecular phylogenetic, micromorphological), as well as traditional (morphological, chorologic, environmental cenotic, population) methods.

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ТАКСОНОМІЧНИЙ СКЛАД І ЗМІНИ В СИСТЕМІ РОДУ *AMELANCHIER* MEDIK.

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У рамках ретроспективного дискурсу представлено коротку історію вивчення роду *Amelanchier* Medik., а також аналіз сучасного стану таксономічних і систематичних його досліджень. Визначено причини, що ускладнюють як ідентифікацію самих рослин, так і побудову системи роду. Названо найзручніші таксономічні ознаки роду. Обговорено дискусійні питання системи роду, виходячи з класичних і молекулярно-генетичних позицій. Аналіз доступних публікацій і електронних баз

даних щодо таксономії видів *Amelanchier* дав змогу констатувати їх неоднозначне трактування і зменшення у складі роду числа визнаних видів прийнятого статусу. Можна вважати, що тенденції щодо уточнення статусу видів свідчать про зміну поглядів на таксономію ірги під кутом зору певної концепції, зокрема переходу від монотипної до політипної концепції виду, коли обмежена кількість відмітних ознак під час детальнішого дослідження виявляється проявом варіабельності виду в процесі його пристосування до чинників зовнішнього середовища. Виявлені в різних публікаціях розбіжності щодо видової та внутрівидової класифікації представників роду вказують на незавершеність його системи і необхідність проведення подальших досліджень із використанням як новітніх, так і традиційних методів.

Ключові слова: агамовид, ДНК-послідовність, мікровид, підродина, триба Maleae.

ТАКСОНОМИЧЕСКИЙ СОСТАВ И ИЗМЕНЕНИЯ В СИСТЕМЕ РОДА *AMELANCHIER* MEDIK.

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В рамках ретроспективного дискурса представлена краткая история изучения рода *Amelanchier* Medik., а также анализ современного состояния таксономических и систематических его исследований. Определены причины, затрудняющие как идентификацию самих растений, так и построение системы рода. Названы наиболее удобные таксономические признаки рода. Обсуждены дискуссионные вопросы системы рода исходя из классических и молекулярно-генетических позиций. Анализ доступных публикаций и электронных баз данных по таксономии видов *Amelanchier* позволил констатировать их неоднозначную трактовку и уменьшение в составе рода числа признанных видов принятого статуса. Можно полагать, что тенденции уточнения статуса видов свидетельствуют об изменении взглядов на таксономию ирги с точки зрения определенной концепции, в частности перехода от монотипной к политипной концепции вида, когда ограниченное количество отличительных признаков при более детальном исследовании оказывается проявлением вариабельности вида в процессе приспособления к факторам внешней среды. Обнаруженные в различных публикациях разногласия, касающиеся видовой и внутривидовой классификации представителей рода, указывают на незавершенность его системы и необходимость проведения дальнейших исследований с использованием как новейших, так и традиционных методов.

Ключевые слова: агамовид, ДНК-последовательность, микровид, подсемейство, триба Maleae.

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