

## CHAPTER FOUR: THE CORPUSES

### The compilation of the corpuses

No Czech-English or English-Czech dictionary could be used for the compilation of a corpus because the mycological terminology is highly specialized and thus not included in general dictionaries. The only multi-language dictionary by KARL BERGER *Mykologisches Wörterbuch* proved to be very unreliable in the English part as the following example shows quite clearly: *Amanita phalloides* — muchomůrka zelená, one of the best known mushrooms, has four English names in BERGER: (i) poison amanita, which is also used by RINALDI & TYNDALO, (ii) destroying angel, which is the English name of *Amanita virosa* — muchomůrka jízlivá, according to all the English books on mushrooms, (iii) death-cup, which is an obsolete term found in some American dictionaries, the modern term, the only one found in books on mushrooms, being Death Cap, not mentioned by BERGER, (iv) death-angel, which is mentioned only in the *Collins English Dictionary*. The *English Duden* does not give the botanical names but even without them, and with the help of drawings, there is an obvious mix-up between Cep, *Boletus edulis*, and Chestnut boletus, *Boletus castaneus*. On the other hand, *Duden* supplied one name unknown before and confirmed by a dictionary: Goat's Beard.

The corpus had to be constructed from Czech and English books on mushrooms. At the beginning, only three English books were available (MAJOR, CLARKE, rinaldi & tyndalo), which was in contrast with more than fifteen Czech and Slovak books. The procedure was to look for the same scientific term in a Czech and in an English book and if one was found, the Czech and the English name of the mushroom could be linked and entered into the main corpus. However, very few Czech — English correspondences could be established. Most of the Czech names had no English translations and formed the largest corpus, many English names had no Czech counterparts and formed the second largest corpus, while the main corpus with the Czech & English names linked together, was the smallest one. Clinton's Boletus, *Boletus clintonianus* from RINALDI & TYNDALO is a good example. It had to be put into the No Czech Equivalent corpus because it could not be found in the modern Czech popular books. Later on, its scientific name was found to be one of the 31 (!) synonyms for klouzek sličný in PILÁT & DERMEK.<sup>34</sup> and it was shifted into the main corpus.

The existence of scientific synonyms is the result of the constant development of the taxonomy. We can quote two examples. The first one refers to *Inocybe fastigiata*, vláknice kuželovitá. While to most authors this is just one species, the French mycologist R. HEIM distinguishes ten varieties of *Inocybe fastigiata* (according to PŘÍHODA & URBAN). The second example is quoted from SMOTLACHA & MALÝ:

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34 DICKINSON & LUCAS, however, identify *Suillus grevillei* as Larch Boletus, which in RINALDI has the scientific name of *Boletus laricinus*. This name, in its term, has other synonyms in PILÁT & DERMEK and thus corresponds to klouzek slizký.

For the sake our readers we can quote here the changes in the scientific name of **Wood Blewit**, čirůvka fialová:

*Agaricus nudus* Bulliard 1789

*Agaricus nudus* Bull ex Fries

*Tricholoma nudum* (Bull ex Fr.) Kummer 1874

*Rhodopaxillus nudus* (Bull ex Fr.) Maire 1914

*Lepista nuda* (Bull ex Fr.) Cooke 1884

*Lepista nuda* (Bull ex Fr.) W.C. Smith

E. M. Fries (abbreviated to Fr.) took over Bulliard's name and thus it became official with the publication of Fries's *Systema mycologium* in 1821. /Fries (and A.B. Peesoon, *Synopsis methodica fungorum*, 1801, for the *Gasteromycetes*), is the beginning of the official terminology and anything before him, based on Linnaeus, was not recognised unless Fries, or some later mycologist, took it over. This taking over is indicated by 'ex', even when the new name means a new genus. -JH/

In 1874 Kummer introduced the genus *Tricholoma* and moved our fungus from *Agaricus* to the new genus. In 1914 Maire moved the species with rosy spores from *Tricholoma* into *Rhodopaxillus* and for about 20 years our species was called *Rhodopaxillus nudus*. However, it was found that W. G. Smith upgraded Fries's sub-genus *Lepista* to a genus a long time before Maire and as there is identity between Smith's *Lepista* and Maire's *Rhodopaxillus*, the older name is the official one because it was published first. (1983.16, transl. by JH).

The various names of a mushroom from the same *genus* are commented upon by ARORA:

Anyone who has used more than one mushroom book can testify to the frustration of finding different names applied to the same fungus (synonyms), or one name applied to several different fungi (homonyms). For instance, *Clitocybe nuda* (the blewit) is better known as *Lepista nuda*, and was formerly known as *Tricholoma nudum*. It has been incorrectly called *Tricholoma personatum*, and in Europe is also known as *Rhodopaxillus nudus*! (1986.10)

ARORA (1986.550) also quotes 34 names given to one species by various investigators in attempts to break up one giant genus. ARORA's list was rearranged for our purposes and is printed here in two alphabetical versions, one based on the head and the other based on the modifier:

*Boletus sericeus*, *Coriolopsis occidentalis*, *Coriolus occidentalis*, *Daedalea subconeger*, *Fomes gourliaei*, *Microporus illotus*, *Microporus lanatus*, *Microporus lenis*, *Microporus occidentalis*, *Microporus scorteus*, *Polyporus badiolutescens*, *Polyporus gourliaei*, *Polyporus illotus*, *Polyporus lanatus*, *Polyporus lenis*, *Polyporus occidentalis*, *Polystictus cyclodes*, var. *homoporus*, *Polystictus extensus*, *Polystictus illotus*, *Polystictus lanatus*, *Polystictus lenis*, *Polystictus malachodermus*, *Polystictus occidentalis*, *Polystictus scalaris*, *Polystictus scorteus*, *Polystictus subconeger*, *Polystictus substrogosus*, *Scindalma gourliaei*, *Trametes devexa*, *Trametes heteromalla*, *Trametes hispidula*, *Trametes lanata*, *Trametes scalaris*, *Trametes wahlenbergii*.

*Polyporus badiolutescens*, *Polystictus cyclodes* var. *homoporus*, *Trametes devexa*, *Polystictus extensus*, *Fomes gourliaei*, *Polyporus gourliaei*, *Scindalma gourliaei*, *Trametes heteromalla*, *Trametes hispidula*, *Microporus illotus*, *Polyporus illotus*, *Polystictus illotus*, *Trametes lanata*, *Microporus lanatus*, *Polyporus lanatus*, *Polystictus lanatus*, *Microporus lenis*, *Polyporus lenis*, *Polystictus lenis*, *Polystictus malachodermus*, *Coriolopsis occidentalis*, *Coriolus occidentalis*, *Microporus occidentalis*, *Polyporus occidentalis*, *Polystictus occidentalis*, *Polystictus scalaris*, *Trametes scalaris*, *Polystictus scorteus*, *Microporus scorteus*, *Boletus sericeus*, *Daedalea subconeger*, *Polystictus subconeger*, *Polystictus substrogosus*, *Trametes wahlenbergii*.

The important thing is that three names from the four quoted above in SMOTLACHA & MALÝ for the **Wood Blewit** are still used: MAJOR (1974) uses *Tricholoma* and *Lepista*, RINALDI & TYNDALO (1974) use *Tricholoma* only, PILÁT (1969) has *Lepista* and *Rhodopaxillus* (and translates both with 'rudočechratka' = rhodopaxillus), SMOTLACHA & MALÝ, DERMEK, and DERMEK & LIZOŇ use all three, for the benefit of the reader.

As was mentioned elsewhere, only popular Czech books published in the last 25 years were exploited in the formation of the corpus, as a rule. 'As a rule' means that in some cases the number of scientific synonyms given in popular books like DERMEK and DERMEK & LIZOŇ was not sufficient and in the end older books (KAVINA, MACKŮ) and specialized books (CEJP, PILÁT, VELENOVSKÝ) had to be referred to. Eg., the Czech name for **Stone Fungus**, *Polyporus tuberaster*, is mentioned only in KAVINA's book *Houby* published in 1919 (choroš slepák). The proportion of Czech — English pairs based on older Czech literature is very low, though, and most of the main corpus is based on modern books.

Later more English books became available, a few from libraries and museums in the Czech Republic and in Slovakia. The bulk of English books, however, was available in libraries in US and UK. As the visits to the libraries were very short, a number of books were bought in shops.

When a new English book on mushrooms became available, the procedure was as follows:

#### STEP ONE

All English names in the book were checked against the English names in the Main Corpus. The following specimen of the corpus shows that alphabetic arrangement of the entries is based on the English names:

#### MAIN CORPUS:

**Big Blood Stalk** helmovka krvonohá PKL [28]  
**Bleeding Mycena** MAJ:BR,NA+RIN:NA  
**Reddish-Brown Mycena** MAJ: NA  
*Mycena haematopus*

**Big Laughing Gymnopilus,**  
**Big Laughing Mushroom** *see Pholiota, Orange*

**Big Sheath Mushroom** *see Grisette, Rose-gilled*  
**Birch Ball** *see Dryad's Saddle*

**Birch Bolete** *see Boletus, Brown Birch*

**Birch Bracket,**  
**Birch Conk,**

**Birch Fungus** *see Razor Strop Fungus*  
**Birch Lenzites** MAJ:BR,NA trámovka březová [29]

**Birch Mazegill KNI**

lupeník březový KOT

*Lenzites betulina**Trametes betulina**Daedalea betulina*

If the English name from the book had already been included in the Main Corpus, the initials of the author of the book were added into the entry, eg. if Bleeding Mycena from ARORA was found to exist in the MC (Main Corpus), only the initials ARO were added to the entry:

**Big Blood Stalk**

helmovka krvonohá PKL

[28]

**Bleeding Mycena** MAJ:BR,NA,RIN:NA,ARO**Reddish-Brown Mycena** MAJ: NA*Mycena haematopus*

## STEP TWO

If the new English name was not found in MC, the No Czech Equivalent Corpus (NCE) was searched.

Specimen of the No Czech Equivalent Corpus:

**Polypore,****Bitter P. ARO**

-0

**Iodine P. ARO***Polyporys hirtus**Albatrellus hirtus**Scutigera hirtus***Blue-capped P. ARO**

-0

*Albatrellus flettii***Incense Cedar P. ARO**

-0

*Tyromyces amarum***Marshmallow P. ARO**

-0

*Tyromyces leucospongia*

The new name could be **Gilled Polypore**, again from ARORA. The quotation from NCE shows that it was not recorded there.

Although the No Czech Equivalent corpus contained only about sixty entries in the beginning and could be searched quickly, the existence or non-existence of a species in the corpus could be decided only when the scientific name was checked as well. For that purpose the scientific names were listed separately in 'Latin 1' and 'Latin 2' indexes. The second index was based on the adjectives because some English books have their indexes based on the attributes:

A specimen of the Latin 1 index:

hebeloma colvini Hebe

helvella californica Hel

hydnum fennicum Hydn  
 hydnum septentrionale Hydn  
 hygrophorus flavodiskus Hygr  
 hygrophorus fuliginus Hygr  
 hygrophorus lauræ Hygr

A specimen of the Latin 2 index:

collybia familia Coll  
 galera flava Gal  
 hygrophorus flavodiskus Hygr  
 cantharellus floccosus Chant  
 psilocybe foenicicii Psilo  
 amanita frostiana Ama  
 hygrophorus fuliginus Hygr

An abbreviation at the end of each lined referred to the English entry in the corpus.

### STEP THREE

As the alphabet of MC was based on the English names, the numerous scientific names included in it had to be transferred to a special list and alphabetically arranged (APPENDIX 1, Latin 1 and Latin 2). So when an English name did not exist in MC or in NCE, the list of scientific names from MC was checked. As the scientific name of **Gilled Polypore** is *Lenzites betulina*, it was found in the Latin 1 list with a reference to the English beginning in **Birch**. In this way a new English name was added to the entry in MC (and a cross-reference to entry 29 was placed in its proper position under **G**).

**Birch Lenzites** MAJ: BR, NA                      trámovka březová                      [29]

**Birch Mazegill** KNI                                      lupeník březový KOT

**Gilled Polypore** ARO

*Lenzites betulina*  
*Trametes betulina*  
*Daedalea betulina*

#### Latin 1

Lentinellus omphaloides Saw Gill Nav  
 Lentinus lepideus Scaly Lentinus  
 Lentinus squamosus Scaly Lentinus  
 Lentinus tigrinus Saw Gill Ti  
 Lenzites betulina Birch  
 Lenzites quercina Maze  
 Leotia atrovirens Slippery Cap Gr  
 Leotia lubrica Jelly  
 Lepiota aspera Parasol Rou  
 Lepiota cepaestipes Lepiota O  
 Lepiota clypeolaria Shield  
 Lepiota cristata Parasol Stin

#### Latin 2:

Galactinia badia Pig's Ears 1  
 Peziza badia Pig's Ears 1

Plicaria badia Pig's Ear 1  
 Boletus badius Boletus C 2  
 Xerocomus badius Boletus C 2  
 Daedalea betulina Birch  
 Lenzites betulina Birch  
 Trametes betulina Birch  
 Ungulina betulina Razor  
 Piptoporus betulinus Razor  
 Placodes betulinus Razor  
 Polyporus betulinus Razor  
 Boletus bicolor Boletus T  
 Tricholoma bicolor Blewit

If in this case there had been no entry under *Lenzites*, there could be one under *betulina* in Latin 2.

#### STEP FOUR

If the new English name had not been found in MC and in NCE, neither under the English alphabets nor in the Latin lists, the next step was a search in a list of Czech names with no English equivalents. Actually there were four lists of Czech names with no English equivalents: Czech 1, Czech 2, Latin 1, and Latin 2. The abbreviations at the ends of lines indicate the books used for building the list.

##### Czech 1:

hadovka valčická Phallus hadriani  
 hadovka valčická Phallus imperialis  
 hadovka valčická Phallus arenarius H-DV  
 helmovka buková Mycena fagetorum S&V  
 helmovka jednobarevná Mycena concolor KLÁ  
 helmovka jesenní Mycena avenacea KLÁ  
 helmovka krvavá Mycena sanguinolenta KLÁ  
 helmovka krvomléčná Mycena sanguinolenta GAR  
 helmovka leponohá Mycena inclinata DAT  
 helmovka leponohá Mycena calopoda H-DV  
 helmovka leponohá Mycena calopus H-DV  
 helmovka louhová Mycena alcalina DAT  
 helmovka medonohá Mycena renati P-U  
 helmovka medonohá Mycena flavipes P-U  
 helmovka nafialovělá Mycena pearsoniana PŘÍ-R.TXT  
 helmovka narůžovělá Mycena rosea KLU  
 helmovka pařezová Mycena tintinabulum KLÁ  
 helmovka raná Mycena praecox DAT  
 helmovka růžová Mycena rosea GAR  
 helmovka růžová Mycena roseicoloris PŘÍ-R.TXT  
 helmovka šafránová Mycena crocata KLÁ  
 helmovka šedá Mycena cinerella KLÁ  
 helmovka šiškomilná Mycena vernalis H-DV  
 helmovka šiškomilná Mycena strobilicola PŘÍ-R.TXT  
 helmovka sněhonohá Mycena pseudogalericulata DER  
 helmovka sněhonohá Prunulus niveipes DER

helmovka sněhonová *Mycena polygrammavar.albida* DER  
 helmovka sněhonová *Mycena niveipes* DER  
 helmovka trsnatá *Mycena tintinnabulum* ČIH  
 helmovka vlasová *Mycena capilaris* KLÁ  
 helmovka zelenobřítka *Mycena viridimarginata* ŠKU  
 helmovka zoubkatá *Mycena pelianthina* P-U  
 helmovka zoubkatá *Mycena zephirus* KLÁ

## Czech 2

čirůvka krokodýlí *Tricholoma caligatum* HAG.TXT PIL  
 penězovka kroucená *Collybia distorta* PŘÍ&U.TXT  
 helmovka krvavá *Mycena sanguinolenta* KLÁ  
 holubinka krvavá *Russula sanguinea*  
 voskovka krvavá *Hygrocybe miniata* PŘÍ-R.TXT  
 pevník krvavějící *Stereum sanguinentum* ČIH  
 hřib krvavý *Boletus sanguineus* PŘÍ&U.TXT  
 křemenáč krvavý *Boletus sanguinescens* PŘÍ-R.TXT  
 křemenáč krvavý *Leccinum sanguinescens* PŘÍ-R.TXT  
 ryzec krvomléčná *Mycena sanguinolenta* GAR  
 ryzec krvomléčný *Lactarius sanguifluus*  
 žampion křídový *Agaricus cretaceus* D&P  
 žampion křídový *Psalliota cretacea* D&P  
 hřib kříšť *Boletus calopus*

## Latin 1

helmovka jesenní *Mycena avenacea* KLÁ  
 helmovka šedá *Mycena cinerella* KLÁ  
 helmovka jednobarevná *Mycena concolor* KLÁ  
 helmovka šafránová *Mycena crocata* KLÁ  
 helmovka buková *Mycena fagetorum* S&V  
 helmovka medonohá *Mycena flavipes* P-U  
 helmovka sněhonová *Mycena niveipes* DER  
 helmovka nafiálovělá *Mycena pearsoniana* PŘÍ-R.TXT  
 helmovka zoubkatá *Mycena pelianthina* P-U  
 helmovka sněhonová *Mycena polygrammavar.albida* DER  
 helmovka raná *Mycena praecox* DAT  
 helmovka sněhonohá *Mycena pseudogalericulata* DER  
 helmovka medonohá *Mycena renati* P-U  
 helmovka narůžovělá *Mycena rosea* KLU  
 helmovka růžová *Mycena rosea* GAR  
 helmovka růžová *Mycena roseicoloris* PŘÍ-R.TXT  
 helmovka krvavá *Mycena sanguinolenta* KLÁ  
 helmovka krvomléčná *Mycena sanguinolenta* GAR  
 helmovka šiškomilná *Mycena strobilicola* PŘÍ-R.TXT  
 helmovka pařezová *Mycena tintinnabulum* KLÁ  
 helmovka trsnatá *Mycena tintinnabulum* ČIH  
 helmovka šiškomilná *Mycena vernalis* H-DV  
 helmovka zelenobřítka *Mycena viridimarginata* ŠKU  
 helmovka zoubkatá *Mycena zephirus* KLÁ

## Latin 2

ryzec krvomléčný *Lactarius sanguifluus*  
 holubinka krvavá *Russula sanguinea*  
 křemenáč krvavý *Boletus sanguinescens* PŘÍ-R.TXT



## SYNONYMS:

*leccinum* — *boletus* — *krombholzia*

*leccinum* — *boletus*

*lentinellus* — *lentinus* COCHLEATUS DAT

*lentinus* — *panus* TIGRINUS

*lenzites* — *trametes* — *daedalea* MAJ, DAT

*lepiota* — *cystoderma* DAT

*lepiota* — *macrolepiota*

*lepista* — *clitocybe* GAR, K&P

*lepista* — *tricholoma* — *rhodopaxillus* NUD/SAEV/PERSONAT/BICOLOR

*leptoporus* — *tyromyces* — *grifola* — *laetiporus* — *boletus* — *polyporus* SULPH

Some of the synonyms are limited to one species, eg *Collybia velutipes* and *Flammulina velutipes*, in which the genus is different. In *Tricholoma auratum*, *Tricholoma equestre* and *Tricholoma flavovirens* the genus is the same. Some of the synonyms are more general, eg *boletus* — *suillus* — *ixocomus*, *boletus* — *xerocomus*, *ramaria* — *clavaria*.

The list of synonyms was compiled from the all English books quoted in the references and from Czech popular books published in the last 25 years. The inclusion of more detailed books like PILÁT & DERMEK would have extended the number of the synonyms enormously, without any relevance for the corpus.

## STEP SIX

If the list of synonyms did not help, the English names without any Czech equivalent was entered into the No Czech Equivalent corpus.

**The corpuses**

As was already mentioned in the preceding paragraphs, there are three corpuses and a number of appendixes.

The main corpus has 610 entries, ie 610 species of mushrooms with 1,741 Czech and 1,572 English names. The No Czech Equivalent corpus has 507 entries and the No English Equivalent 1,190 entries.

## THE MAIN CORPUS

Common English names were given preference in the alphabetic arrangement of the corpus. *Volvaria speciosa*, kukmák okázalý, has three English names: **Rose-gilled Grisette**, **Handsome Volvaria**, and **Dunghill Agaric**. As **grisette** is an English noun, **Rose-gilled Grisette** is the main entry for *Volvaria speciosa* (under **Grisette**, **Rose-gilled**) while **Dunghill Agaric** and **Handsome Volvaria** are treated as synonyms. If there is no pure common English name, eg **Grey-Brown Amanita**, *Amanita porphyria*, the species is listed under **Amanita**. These two criteria operate against one another in that the **Agarics**, **Amanitas**, **Armillarias** etc are not clustered together as full entries: **Dunghill Agaric**, as shown above, is listed under **Grisette**. There is, however, always a reference to the main entry, eg under the **Agarics** we find **Dunghill A. see Grisette, Rose-gilled**.

In some cases the frequent occurrence of a word in the names of mushrooms is summarized in a list of references, eg under **Cap, Fungus, Mushroom** for all names containing the word 'cap, fungus, mushroom'. In this way we learn that there are 147 names with the word 'fungus', nearly 130 names contain the word 'cap' and 'mushroom' occurs in 70 names.

Let us summarize what has been said about its arrangement and demonstrate this on a short specimen.

**Mycena,**

**Alkaline M. see Stump Fairy M.**

**Bleeding M. see Big Blood Stalk**

**Bonnet M. PHI** helmovka tuhonohá ČIH [354]

**Capped M. MAJ:NA**

**Grey Bonnet M. MAJ:BR**

**Common M. WBE**

**Leathery M. REI**

**Rosy-Gill Fairy Helmet KNI**

*Mycena galericulata*

**Carpet Pin M. PEG** kalichovka oranžová DAT [355]

*Gerronema fibula*

*Mycena fibula*

*Omphalia fibula*

*Omphalina fibula*

*Rickenella fibula*

**Clean M. MAJ:NA** helmovka ředkvičková PŘÍ [356]

**Lilac M. MAJ: BR**

**Pink M. P&S**

**Purple Fairy Helmet KNI**

*Mycena pura*

**Common M. see Bonnet M.**

**Grey Bonnet M. see Bonnet M.**

**Leathery M. see Bonnet M.**

**Lilac M. see Clean M.**

**Milk Drop M.,**

**Milky M. see Milk Stalk**



tries on the *Mycena* group, eg. **Alcaline M., Bleeding M., Bonnet M., Capped M., Carpet etc** are referred to under 'A', 'B' and 'C', respectively (*Alcaline Mycena see Mycena etc*).

#### THE NO-ENGLISH-EQUIVALENT CORPUS

This corpus has been compiled from popular Czech and Slovak books published in the last 25 years only. The corpus contains not only species fully described in the main entries, with accompanying drawings and photographs, but also the 'other species' (as called in the survey of the books in the chapter on sources) mentioned in the texts, usually species that can be mistaken for the described one or the rarer species.

The size of the corpus is not very important. The Slovak and Czech books on mushroom written for the general public always give Slovak and Czech names to all species mentioned in the book, a rule not established in the English speaking countries.

The main purpose of this corpus was to supply Czech names to English names (see Steps One to Six above). Specimens of the corpus were printed under Step Four above. Full versions of this corpus and of the No-Czech Equivalent corpus are not relevant for the present discussion and are not part of this book.

#### THE NO-CZECH-EQUIVALENT CORPUS

This corpus contains English names of species to which no Czech counterparts have been found. Many of these species, however, are described in Czech books, eg CEJP, PŘÍHODA & ZEJBRLÍK, but only with their scientific names. This is indicated by the name of the Czech author and the abbreviation *Lat* after it.

The number of entries in this corpus is relatively high: 507. Most of the entries in this corpus, however, come from two books, ARORA and MCKNIGHT. ARORA describes over 2,000 species, the highest number of all English, Czech and Slovak books available, and quotes all English names known. MCKNIGHT describes about 1,000 species but introduces a number of English names, translations of the international scientific names, which are not found in any other English book. ARORA and MCKNIGHT supplied 433 species out of the 507 in this corpus.

More than seventy species in this corpus are named after a person or a geographical name, which indicates local varieties or species. Some of the following names occur twice or three times:

*ahsii, arhenii, badhami, bakerensis, balloni, barrowsii, barsii, bernardii, birnbaumii, booniana, cajanderi, chateri, cokeri, colvini, cookei, cookeianum, cooperi, copelandi, cubensis, curtisii, earliamum, ellisii, flettii, frostiana, gardneri, hardii, harkensii, josserandii, kaufmanii, kunzei, lakei, laurae, leaiana, morgani, murrarii, nancyae, nanmfeldtii, overholtzii, peckiana, peckii, ravenelii, rodmani, russellii, schweinitzii, smithii, stevensii, stuntzii, wrightii, zelleri, zollingeri; adirondackensis, americanus, californica, caroliniana, mexicana, oregonensis, tennesseensis, texensis*