AMERICAN CODE AND LATER LECTOTYPIFICATIONS OF LINNAEAN GENERIC NAMES DATING FROM 1753: A CASE STUDY OF DISCREPANCIES

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Summary
The typification of the 112 Linnaean generic names dating to 1753, for which American Code lectotypifications differ from later ones, is reviewed in the light of two proposals to amend the International Code of Botanical Nomenclature at the XIV International Botanical Congress at Berlin in 1987. As part of the review, Dioscorea sativa L. is lectotypified and thus synonymized under D. villosa, and Agrostis alba L. is placed in synonymy under Poa nemoralis L. The two proposals (Proposals 291 and 297) were both included in the report of the Committee on Lectotypification, and are found to have differential effects in 58 of the 112 cases examined. It is shown that adoption of the provision to remove all constraints on the priority of American Code lectotypifications would result in nomenclatural changes in 48 cases as against 10 if the proposal to adopt 1935 as the starting date for priority of lectotypification was adopted. Moreover, with priority of American Code lectotypifications, changes would arise in the names of subdivisions of families in 4 cases and in names very widely accepted at the generic level in 21 cases, whereas no such changes would occur if a 1935 starting date were adopted. The generic names involved include Agrostis, Andropogon, Apium, Cleome, Cucurbita, Draba, Elymus, Ophrys, Scabiosa, Scirpus and Sisymbrium. At the infrageneric level (including 7 cases in which a few authors recognize segregate genera), changes would be required in 26 cases if Proposal 297 (American Code priority) were adopted on its own, but in only 10 if Proposal 291 (1935 start) were accepted. The authors conclude that stability of nomenclature, at least at the levels of genera and subdivisions of genera of phanerogams, is better served by establishing 1935 as the starting date for priority of lectotypification.

Introduction
One of the issues referred to the Special Committee on Lectotypification set up at the XIII International Botanical Congress held in Sydney, Australia in 1981, was the status of lectotypifications made under the American Code (Arthur et al., 1907). Since the XII Congress in Seattle in 1969, the priorability of lectotypification under the American Code has been limited by provisions of Article 8 of the ICBN (Stafleu et al., 1972; Voss et al., 1983) that permitted such lectotypifications to be superseded. Some, however, have considered that American Code lectotypifications must stand unless an alternative can be demonstrated to be in some sense better. This appears to have been the intent of the original proposal at Seattle, but the wording adopted does not support this point of view unless the word “superseded” is defined as “changed for the better”, which does not conform to its Concise Oxford Dictionary (Sykes, 1982) definition (“set aside; cease to employ; adopt, or appoint another person or thing in place of; take the place of; ust or supplant”), and is only one of several definitions of “to supersede” given in Webster (Gove, 1981) (“to make obsolete, inferior, or outmoded”; “to make void”; “to make superfluous or unnecessary”; “to take the place of and outmode by superiority”; “to cause to be supplanted in a position or function”; “to take precedence over”).

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The Committee on Lectotypification (McNeill, 1986) took the view that there was no justification for treating American Code lectotypifications differently from other lectotypifications. Its report (McNeill, 1986) included two proposals that are relevant to the status of American Code lectotypifications. One (Proposal 297) proposes the removal of the wording in Article 8 that can discriminate against American Code lectotypifications. The other (Proposal 291) proposes that priority of lectotypification be limited to a starting date of 1 Jan. 1935, which would effectively exclude all American Code lectotypifications. The Committee suggested 1 Jan. 1935 because it follows the Fifth International Botanical Congress held in Cambridge, England, at which the type method was first incorporated into the International Code of Botanical Nomenclature, and coincides with the date from which Latin diagnoses of new taxa are required, another provision adopted at Cambridge in 1930. The Committee notes, however, that an earlier post-Cambridge date, such as 1 Jan. 1931, would be an alternative.

Changes of this sort in the Code are best made with good knowledge of the implications for nomenclatural stability of the changes being proposed. This paper has been prepared in order to provide some data that will permit an evaluation to be made of the effect of these two proposals.

For this purpose, the generic names published by Linnaeus and dating to 1753 have been chosen as a sample. This is partly because many of these names are very familiar, applying as they do, to relatively large, widely distributed and generally recognized genera. The other reason for choosing this set is that a fairly complete index of lectotypifications of these names exists in the Ray Society facsimile edition of Linnaeus's *Species plantarum* (Heller and Stearn, 1959). This index uses distinctive symbols to indicate the types designated in a series of works, of which five are particularly important in this evaluation. These comprise four publications (Britton and Brown, 1913; Britton, 1918; Britton and Millspaugh, 1920; and Britton and Wilson, 1923–1926) which followed the American Code, and one (Hitchcock and Green, 1929) which did not. A total of 112 Linnaean generic names dating to 1753 have had different types designated by Hitchcock and Green (1929) (or other later authors in the case of two fern genera and a fungal/algal one) from those previously designated by authors following the American Code. A further five genera that might appear from the Heller and Stearn (1959) list to fall into this category, but do not, in fact, do so, are briefly noted in the alphabetical sequence, but are not numbered. (For details of some of the typification criteria under the American Code, see McNeill et al., 1983; Zijlstra, 1986.)

The enumeration below attempts to indicate current usage of these 112 generic names, and whether and how this usage would be disturbed: 1) if Proposal 297 was accepted on its own (i.e. with Proposal 291 defeated) and 2) if Proposal 291 was accepted (if it were, the fate of Proposal 297 would be irrelevant). The procedure followed was to assess taxonomic usage in a set of 18 standard reference works (see Table 1), to ascertain from these and from the abstracting literature the treatments adopted in recent monographs and revisions, and, in cases where the information still seemed inadequate, to consult earlier treatments such as that in the first edition of *Die natürlichen Planzenfamilien*, and indices such as Pfeiffer (1871–1875), to detect any infrageneric (or even segregate generic) names that might be in current use. The reference works were selected to reflect current treatment of North Temperate taxa and include some which often have narrow generic concepts. To some extent the choice was determined by ready availability.

The results are presented in a fairly standard layout with the types and those who designated them listed first, including in a few cases a third or fourth type designated by these or other authors. All type designations that have been traced are cited, but some, particularly the more recent "redesignations", must certainly have been overlooked. Because of the starting date of 1 Jan. 1935 for priority of lectotypification in Proposal 291, all the relevant lectotypifications in the Hitchcock and Green list published as an appendix
Table 1. Standard reference works, referred to by number in the text.

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* Used consistently only for names lectotypified in the Caribbean floras.

...to the Cambridge rules (Briquet, 1935) are also included. So far as the genera being considered are concerned, these differ in only two cases (Dolichos and Pedicularis) from those Hitchcock and Green (1929). The 1935 list is the same as that (Camp et al., 1947) included as a supplement to the unofficial “Brittonia Rules”; consequently the 1947 reference has generally been omitted. The sequential number of the species within the genus in Species plantarum (Linnaeus, 1753) is noted in parenthesis after the type.

The taxonomic disposition of the species whose names provide the alternative generitypes is then indicated, starting with any treatments that are taxonomically divergent at the generic level, followed by those that conform generically but are the most detailed in their infrageneric treatments (within this group, the autonyms come last), and culminating with those that do no more than assign the species to the original Linnaean genus. In addition to the 18 standard works listed in Table 1 and recent monographs and revisions, a few older works were included when they appeared to provide the only detailed treatments. A “Comments” section is included when this appears informative, as, for example, when conservation has been invoked or when a type has been superseded under the “major conflict” provisions of Article 8 of the Code (Voss et al., 1983). The synopsis concludes with statements of the nomenclatural “Effects” under the two possible scenarios referred to above, i.e. Proposal 297 adopted on its own, which would preclude supersession of American Code lectotypifications, and Proposal 291 adopted, which would make Hitchcock and Green (1935) the first priorable lectotypification for virtually all these generic names. Because the Committee on Lectotypification has suggested the possibility of other post-Cambridge dates, any difference in the nomenclatural effects of another date in the 1930–1935 period is noted.

This analysis was started as an assignment on taxonomic literature in a graduate course on herbarium taxonomy and nomenclature. Genera 1–5, 7–15 and 17–21 were initially researched by L. L. Consaul, 22–31, 33–40 by D. S. Katz and 41–45 and 47–58 by E. A. Odell. (The draft accounts prepared were the basis for the grades for the course.) Subsequent genera were later researched by E. A. Odell who also assisted J. McNeill in his rewriting of it for publication.

**Summary of Results**

A summary of the nomenclatural effects of these two proposals follows:

I. Change in usage of names of subdivisions of families (tribal or subtribal names affected are indicated in parentheses)—(except in the case of Cactus, there are also changes at the generic level, see II below):

Prop. 297 (American Code priority) Prop. 291 (1935 start)

*Achyanthes* (Amaranthaceae—Achyranthinae) [None]

*Agrostis* (Poaceae—Agrostideae)
Cactus (Cactaceae—Cacteae)
Sisymbrium (Brassicaceae—Sisymbrieae)

II. Change in dominant usage at the generic level (other generic names affected are in parentheses):

<table>
<thead>
<tr>
<th>Prop. 297 (American Code priority)</th>
<th>Prop. 291 (1935 start)</th>
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</thead>
<tbody>
<tr>
<td>Achyranthes (Alternanthera)</td>
<td>Delphinium (Consolida)</td>
</tr>
<tr>
<td>Agrostis (Poa)</td>
<td>Draba (Erophila)</td>
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<tr>
<td>Aira (Molinia)</td>
<td>Elymus (Leymus)</td>
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<tr>
<td>Andropogon (Hyparrhenia)</td>
<td>Erysimum (Sisymbrium)</td>
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<tr>
<td>Apium (Petroselinum)</td>
<td>Jatropha (Cnidioscolus)</td>
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<tr>
<td>Baccharis (Conyza)</td>
<td>Ophrys (Listera)</td>
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<td>Cerbera (Thevetia)</td>
<td>Scabiosa (Knautia)</td>
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<tr>
<td>Chaerophyllum (Anthriscus)</td>
<td>Scirpus (Schoenoplectus)</td>
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<td>Cleome (Gynandropsis)</td>
<td>Sisymbrium (Nasturtium,</td>
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<td>Convovulus (Calystegia)</td>
<td>Rorippa</td>
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<td>Cucurbita (Lagenaria)</td>
<td>Verbesina (Eclipta)</td>
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III. Change in usage of some authors at the generic level and of others at the infrageneric level (other generic names affected are in parentheses); in the case of Gnaphalium (marked*), current authors differ in their usage:

<table>
<thead>
<tr>
<th>Prop. 297 (American Code priority)</th>
<th>Prop. 291 (1935 start)</th>
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</thead>
<tbody>
<tr>
<td>Angelica (Archangelica)</td>
<td>Sedum (Hylotelephium)</td>
</tr>
<tr>
<td>*Gnaphalium (Pseudognaphalium)</td>
<td>Anemone (Anemonoides)</td>
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<tr>
<td>Phalaris (Phalaroides)</td>
<td>Bromus (Anisantha)</td>
</tr>
<tr>
<td>Psoralea (Aspalthium)</td>
<td>*Gnaphalium (Filaginella)</td>
</tr>
<tr>
<td>Sedum</td>
<td>Hypochaeris (Porcellites)</td>
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</tbody>
</table>

IV. Change in usage only at the infrageneric level:

<table>
<thead>
<tr>
<th>Prop. 297 (American Code priority)</th>
<th>Prop. 291 (1935 start)</th>
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<tbody>
<tr>
<td>Aconitum</td>
<td>Echium</td>
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<tr>
<td>Anthemis</td>
<td>Erigeron</td>
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<tr>
<td>Barleria</td>
<td>Fritillaria</td>
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<td>Briza</td>
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<td>Bupleurum</td>
<td>Lamium</td>
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<td>Carex</td>
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<td>Crepis</td>
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V. Nomenclature not affected, or affected equally. (In the case of genera marked with an asterisk (*), existing conservation would be redundant if Proposal 291 were accepted):

| Achillea                          | Craca                  |
| Ajuga                             | Cytisus                |
| Androsace                         | Daphne                 |
| Asplenium                         | Dolichos               |

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An editorial change would also be required in Appendix III of the ICBN if Proposal 297 were accepted and Proposal 291 not.

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From this it emerges that, of the 112 generic names analysed, the proposals have differential effects on nomenclature in 58 cases. In one other case (Gnaphalium) current usage varies and the proposals would differentiate between the alternatives (see III above). In 48 of the 58 cases, adoption of Proposal 297 on its own would involve nomenclatural changes, whereas with Proposal 291 this would be true in only 10 cases. More significant, however, are the levels at which these changes would occur. The 4 cases of change in Category I (subdivisions of families) and all 21 cases in Category II (those involving changes in generic names that are very widely accepted) would arise from the adoption of Proposal 297, and none from Proposal 291. This group includes tribes such as the Cacteae (Cactaceae) and genera such as Agrostis, Andropogon, Apium, Cleome, Cucurbita, Draba, Elymus, Ophrys, Scabiosa, Scirpus and Sisymbrium, all very familiar names, often applying to economically important plants. Moreover, in nearly every case, changes in other generic names are involved, such as Alternanthera, Nasturtium, and Petroselinum. By contrast, the three cases involving changes in generic usage that would result from the adoption of Proposal 291 are all of recently segregated genera that are not very widely adopted. Against these can be set four cases that would arise from adoption of Proposal 297. Nomenclatural changes at the infrageneric level only would arise in 22 cases if proposal 297 were to be accepted on its own, as against 7 if Proposal 291 were approved.

It is clear from these data that if Proposal 291 is not adopted, the adoption of Proposal 297 would lead to very extensive and serious nomenclatural changes. In this context, it is of note that the conservation of seven generic names, proposed because of the apparent priority of American Code lectotypifications, would no longer be necessary, were Proposal 291 accepted. These include familiar names such as Hibiscus, Holcus, Leontodon and Nymphaeas. It is, of course, the recognition that there was a problem with many American Code lectotypifications that led to the adoption of the restriction on their priority at the Seattle Congress in 1969. Time has not changed this.

There is, however, another proposal being made to the Berlin Congress, which addresses this issue. This is Proposal 288 by Zijlstra (1986), which would allow the supersession of an American Code lectotypification if the chosen type was the type of a conserved generic name. Zijlstra notes that Cleome, Draba, and Sisymbrium can be “saved” by this provision. To these three, should be added Convulvulus, Ophrys, Scirpus and Verbesina. In addition C. ahouai would not be eligible as type of Cerbera, but C. thevetia would remain priorable over C. manghas, the only type that would preserve current usage. Even if Zijlstra’s (1986) Proposal 288 were to be adopted, this would still leave 14–18 cases (depending on taxonomic treatment) in which changes at the generic level would arise from the adoption of Proposal 297 on its own.

Related to this proposal is the idea that crops up in a few cases and is alluded to in the Rickett and Stafleu review of Nomina generica conservanda et rejicienda spermatophytorum (see Literature Cited), that the citation, in Appendix III of the Code, of a type of a name rejected against a conserved name, gives “official” status to that typification. Although

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4 See also III (above).
5 Although not involving American Code lectotypification, the current proposal to conserve Polygonum with P. aviculare as type would also be unnecessary (see below).
obviously a sensible idea, the Code gives no support for such "conservation" of types of rejected names. (See discussion under Baccharis and Gerardia below.)

This review reveals clearly the difference between the American Code lectotypifications and those proposed by Hitchcock and Green. It is not a matter of the American Code lectotypifications being bad (indeed Stearn (unpublished) has shown from a sample of the first 99 generic names (initial letter A–D) in Species plantarum and Genera plantarum ed. 5 that they are usually the historically most appropriate choices), it is rather that, whereas Britton and his colleagues applied the dicta of Canon 15 of the American Code (Arthur et al., 1907), Hitchcock and Green were much more pragmatic and selected types to preserve then current usage—which in most cases is still current usage. The writings of T. A. Sprague and M. L. Green (e.g. Green, 1925a, 1925b; Sprague, 1926, and an unpublished 70 page typescript by M. L. Green, of which Green (1929) is a summary) give interesting background to this pragmatism: the Hitchcock and Green proposals stem from a "modification of the type-method" achieved "by admitting exceptions in special instances" (Green, unpubl.). This modification Green and Sprague termed the "standard-method", and their lists, like that of Hitchcock and Green (1929), who also describe this procedure, were headed "Standard-species . . ." rather than "Type-species". By 1935, however, the almost identical list had become Species lectotypicae generum Linnaei with "standard-species" included in the parenthetical title as though an English translation (Hitchcock and Green, 1935). Although the lists of Hitchcock and Green were intended to be adopted by a subsequent Botanical Congress as an accepted (in effect conserved) list of types, this was never apparently carried out. Nevertheless, there can be no doubt that they represent lectotype designations under the current provisions of Article 8. Moreover, the 1935 list would retain that status if Proposal 291 were accepted by the Berlin Congress.

Conclusions

Our studies lead us to the inescapable conclusion that nomenclatural stability, at the level of genera and subdivisions of genera at least, will be best served by the acceptance of Proposal 291. Proposal 297 could then also be accepted, as the wording that it would delete becomes largely irrelevant. In a way, this is a straight parallel to the situation with regard to the inclusion in the Code of the requirement for a Latin description or diagnosis for the validation of the names of new taxa. This was first included in the Vienna Code (Briquet, 1906) with an implementation date of January 1, 1908 (cf. McNeill and Greuter, 1986). The reconciliation at Cambridge in 1930 between the American Code and the International Rules led to this implementation being deferred until January 1, 1935. It was this same reconciliation that brought the type method from the American Code into the International Code. It seems, therefore, reasonable that only typification carried out after that date should be binding on the botanical community.

Acknowledgments

We are grateful to the Director, Biosystematics Research Centre, Agriculture Canada, Ottawa, for the extensive use of the facilities of the Plant Research Library, and also to the Librarian and staff of that library for their never failing assistance during the course of our consultation of their collections—a novel task for some of us. We are also extremely grateful to the colleagues who have advised us of treatments and other references that we had overlooked and who have corrected some of our initial errors. In this context we particularly acknowledge G. A. Argus (Ottawa), F. A. Bisby (Southampton), P. V. Heath (Brighton), C. E. Jarvis (BM), D. H. Nicolson (Washington), G. Perry (Perth, Australia), R. E. G. Pichi Sermolli (Montagnana, Italy), K. Pryer (Ottawa) and E. G. Voss (Ann Arbor).

Analyses of Current Usage of Competing Lectotypifications

(The sequential number of the species within the genus in the first edition of Linnaeus's Species plantarum (Linnaeus, 1753) is noted in parentheses after the type. The explanation of the numbered references ("ref. 1" etc.) is given in Table 1, above.)
1) Achillea
   A. santolina (1) Britton and Brown (1913), Britton (1918)
   A. millefolium (14) Hitchcock and Green (1929, 1935)
   A. millefolium: Achillea Sect. Millefolium Series Millefoliatae: Boissier (1875); Achillea: refs. 1, 3-4, 7, 10-12, 15, 18.

   Comments: Santolina L., although also a genus of the Asteraceae tribe Anthemideae, is unconnected nomenclaturally with A. santolina.

   Effect of Prop. 297 (Amer. Code priority): As Achillea is not subdivided by Richardson (1976) or in any other recent work that has been traced, effects could only be at a low infrageneric level (e.g. below sectional level following Boissier's (1875) treatment).

   Effect of Prop. 291 (1935 start): As above.

2) Achyranthes
   A. repens (4) Standley (1915a), Britton and Wilson (1923–1926)
   A. aspera (1) Hitchcock and Green (1929, 1935), Farr et al. (1979)
   A. repens: Alternanthera Subgen. Eualternanthera Sect. Allaganthera: ref. 2; Alternanthera (as A. pungens Kunth): refs. 6, 11, 15, Smith and Downs (1972); Achyranthes: Standley (1915a).
   A. aspera: Centrostachys (as C. aspera (L.) Standley): Standley (1915a); Achyranthes: refs. 2, 11–12, 15.

   Comments: As noted by Melville (1958), the correct name for Achyranthes repens L. in Alternanthera is Alternanthera pungens Kunth, Nov. Gen. et Spec., 2: 206 (1818). Alternanthera repens Gmelin (1791), homotypic with A. achyranthoides Forsk. (1775), the type of Alternanthera, predates A. repens (L.) Link (1821) based on Achyranthes repens.

   Standley (1915b), who treated A. repens as type of Achyranthes, proposed the tribal name Centrostachydaceae to replace Achyranthaceae as that name had previously been applied. Schinz (1934) and Eckardt (1964) accept A. aspera as type of Achyranthes and place it in Amaranthaceae subfamily Amaranthoideae tribe Amaranthinae, whereas Alternanthera is placed by them in the subfamily Gomphrenoideae.

   Effect of Prop. 297 (Amer. Code priority): The 200 species now recognized as comprising Alternanthera would have to adopt the name Achyranthes. A new name would have to be found for the genus of perhaps 100 species now known as Achyranthes. A change in the nomenclature at the level of tribe or subtribe based on Achyranthes, would also be required (e.g. subtribe Achyranthinae).

   Effect of Prop. 291 (1935 start): None.

3) Aconitum
   A. lycoctonum (1) Britton and Brown (1913)
   A. napellus (3) Hitchcock and Green (1929, 1935)

   Comments: The section Lycocotonum is widely recognized (e.g. by Gayer, 1909; Nakai, 1953; Popov, 1957; Barykina et al., 1976; and Lauener and Tamura, 1978), and at subgeneric rank (with priority over Paraconitum) by Tamura and Lauener (1978).

   Effect of Prop. 297 (Amer. Code priority): The infrageneric autonym Aconitum would be transferred from the “Napellus” group, to which it is presently widely applied, to the Lycocotonum group.

   Effect of Prop. 291 (1935 start): None.

4) Adonis
   A. annua (1) Britton and Brown (1913), Farr et al. (1979)
   A. vernalis (2) Hitchcock and Green (1929, 1935)

Effect of Prop. 291 (1935 start): Infrageneric nomenclatural changes are required under Bobrov’s (1937) and Tutin’s (1964) treatments.

5) Agrostis
A. alba (9) Hitchcock (1905), Britton and Brown (1913), Farr et al. (1979)
A. stolonifera (7) Hitchcock (1920, 1923), Hitchcock and Green (1929, 1935), Phillips (1951), Mansfeld (1959)
A. canina (5) Phillipson (1937), Widén (1971)
A. alba: Poa (as P. nemoralis L.): refs. 1, 13, Widén (1971); Agrostis (usually as A. stolonifera L.): refs. 3-4, 6-7, 9-11, 15, 18.

Comments: Phillipson (1937) notes that the original diagnosis (and only descriptive material) of Agrostis alba L. in Species plantarum is taken directly from Royen (1740, p. 59) and that Royen cites a figure by Vaillant that is “undoubtedly of Poa nemoralis L.” (Phillipson, 1937). It is possible to consider that Phillipson thus designated this illustration as the type of A. alba L., but if he did not, Widén (1971) clearly lectotypified the name by the one Royen specimen with the relevant phrase-name. Widén (1971) says that this is of “a species of Poa, probably Poa nemoralis L. 1753.” Veldkamp (in sched.) has since firmly identified this specimen (sheet 913, 62-84) as Poa nemoralis (Jarvis in litt.). Widén also notes that the first lectotypification of A. alba, that by Hitchcock (1905), is of a specimen (LINN 84.23) that was added to the Linnaean Herbarium after 1753, and so is not eligible as a lectotype, a point already accepted by Hitchcock (1920). There is, therefore, no doubt that the type of A. alba refers to Poa nemoralis. By implication, Phillipson (1937) and Widén (1971) are treating Agrostis alba as a synonym of Poa nemoralis, but as we are not aware of any formal statement to this effect we provide one here:


As P. pratensis, the type of Poa, has never been included in Agrostis, this establishes that if A. alba is the type of Agrostis, the name Poa would have preference over it. The existing combination Poa alba (Presl) Kunth is quite independent, being based on Eragrostis alba Presl.

Although several recent works (e.g. Gould and Shaw, 1983) include Poaceae tribe Agrostidae (Agrosteeae) within the tribe Aveneae, the name has been widely applied for a large group of genera with one-flowered spikelets (Hitchcock and Chase, 1951; Pilger, 1954; Hubbard, 1968).

Effect of Prop. 297 (Amer. Code priority): Adoption of A. alba as lectotype would result in Agrostis becoming a synonym of Poa, and would require the 150-200 species (Airy Shaw, 1973) currently included in Agrostis to be transferred to another genus, such as Vilfa Adanson (1763), Apera Adanson (1763) or Trichodium Michaux (1803), depending on the legitimacy or otherwise of Vilfa and the taxonomic delimitation adopted. For those who maintain the tribe Agrostideae, a new name would be required for that large group of grasses.

Effect of Prop. 291 (1935 start): None.

6) Aira
A. caerulea (3) Britton and Brown (1913)
A. caespitosa (8) Hitchcock (1920)
A. praecox (13) Hitchcock and Green (1929, 1935), Phillips (1951)
A. caryophyllea (14) Tsvelev (1976)


Comments: In discussing his lectotypification, Hitchcock (1920) says: “From these [the four species of Aira that Linnaeus included in Flora lapponica] Aira caespitosa is arbitrarily selected as the type.” The reasons for Tsvelev’s selection of A. caryophyllea are not known; both it and A. praecox are invariably regarded as congeneric, and no infrageneric discrimination has been traced.

Effect of Prop. 297 (Amer. Code priority): The 12 species currently included in Aira would require a new name (probably Aspris Adanson) and Aira would have to be applied to the genus of 2–3 species currently called Molinia.

Effect of Prop. 291 (1935 start): None.

7) Ajuga

A. reptans (4) Britton and Brown (1913), Farr et al. (1979)

A. pyramidalis (2) Hitchcock and Green (1929, 1935), Phillips (1951)


Comments: In this genus of about 50 species in the Old World, those who provide an infrageneric classification have always included the two candidate species in the same section, Bugula.

Effect of Prop. 297 (Amer. Code priority): The sectional name Bugula must be replaced by Ajuga (Art. 22.1 of the ICBN, 1983).

Effect of Prop. 291 (1935 start): As above.

8) Andropogon

A. hirtus (9) Nash (1912), Britton and Brown (1913), Britton (1918), Britton and Millsapgh (1920)

A. virginicus (7) Hitchcock (1920), Britton and Wilson (1923–1926)


Comments: Linnaeus treated Andropogon as neuter (A. hirtum, A. virginicum, A. distachyon), but in accordance with Rec. 75A.2.(a) (Voss et al., 1983) the epithets have been corrected to the masculine form.

Effect of Prop. 297 (Amer. Code priority): The 50–75 species of the genus now known as Hyparrhenia would have to be called Andropogon, and a new name would be needed for the 113 or so species currently referred to Andropogon.

Effect of Prop. 291 (1935 start): None.

9) Androsace

A. maxima (1) Britton and Brown (1913), Farr et al. (1979)

A. septentrionalis (2) Hitchcock and Green (1929, 1935)


Effect of Prop. 297 (Amer. Code priority): None, except for the fact that with either type the Section Andraspis should be called Androsace.

Effect of Prop. 291 (1935 start): As above.

10) Anemone
   A. coronaria (7) Britton and Brown (1913), Farr et al. (1979), Holub (1973)
   A. nemorosa (15) Hitchcock and Green (1929, 1935), Phillips (1951)
A. nemorosa: Anemonoides (as A. nemorosa (L.) Holub): ref. 9, Holub (1973); Anemone Sect. Ane-
   monanthera: Ulbrich (1906a, 1906b), Baumberger (1971); Anemone Sect. Sylvia: ref. 12; Anemone: ref. 7, 10–11, 14.


Effect of Prop. 291 (1935 start): Adoption of Anemone for the 32 species that Holub (1973) includes in Anemonoides Miller, and a new name for the 100 or so species currently retained in Anemone by those who adopt this segregation. For others, e.g. those following the Flora europaea treatment, transfer of names at the sectional level will be required.

11) Angelica
   A. archangelica (1) Britton and Brown (1913), Farr et al. (1979)
   A. sylvestris (2) Hitchcock and Green (1929, 1935)
A. archangelica: Archangelica (as A. officinalis Hoffm.): refs. 7, 14, Bertová (1984); Angelica: refs. 1, 6, 8–10.
A. sylvestris: Angelica: refs. 1–3, 6–12.

Comments. A. officinalis Hoffm., the type of Archangelica, is homotypic with Angelica archangelica.

Effect of Prop. 297 (Amer. Code priority): For the substantial number of recent authors who segregate the genera, Archangelica (12 species) would need to be called Angelica and a new name found for the genus of 80 species currently called Angelica.

Effect of Prop. 291 (1935 start): None.

12) Anthemis
   A. maritima (3) Britton and Brown (1913), Britton (1918)
   A. arvensis (8) Hitchcock and Green (1929, 1935), Phillips (1951)

Effect of Prop. 297 (Amer. Code priority): Sectional nomenclature in this genus of 200 species (ref. 14) would be affected in that Sect. Hiorthia would have to be called Sect. Anthemis and a new name found for the group currently called Sect. Anthemis.

Effect of Prop. 291 (1935 start): None.

Antholyza:
Hitchcock and Green (1929, 1935) designated A. cunonia as lectotype, but A. ringens was designated by Brown (1932) and Phillips (1951). Although not involving American Code lectotypification, this is one of the few Linnaean generic names in which an alternative earlier date in Proposal 291 might lead to a different typification (see also Fritillaria, below). Antholyza cunonia is generally included today in Anomalesia N. E. Brown (as A. cunonia) or sometimes in Petamenes Salisb. (Airy Shaw, 1973), whereas A. ringens is generally accepted as typifying Antholyza.

13) Apium
   A. petroselinum (1) Britton and Brown (1913), Britton (1918)
   A. graveolens (2) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)

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Comments: Parsley (Petroselinum crispum = A. petroselinum) was included in Carum by some 19th century authors (e.g. Bentham and Hooker, 1862–1883) but it has long been separated from the celery genus Apium, generally regarded as monotypic, but treated more broadly by Wolff (1927). Effect of Prop. 297 (Amer. Code priority): The 5 species of the parsley genus (Petroselinum) would have to be known as Apium and the celery genus would require a new name. Given the commercial importance of the plants involved, this would be extremely unfortunate.

Effect of Prop. 291 (1935 start): None.

14) Asplenium
A. ceterach (7) Underwood (1899)
A. trichomanes (10) Britton and Brown (1913), Maxon (1926), Copeland (1947)
A. trichomanes: Asplenium Sect. Euasplenium: ref. 7; Asplenium: refs. 1–4, 6–12, 18.

Comments: Asplenium marinum was placed in “Section Euasplenium” by Lowe (1872). Effect of Prop. 297 (Amer. Code priority): None, because Smith’s (1875) typification predates those under the American Code.

Effect of Prop. 291 (1935 start): No apparent effect on nomenclature, although on current evidence the first selection of a type after 1930 was that of A. trichomanes by Copeland (1947) which would replace A. marinum. This changed typification would accord with the use of “Euasplenium” in Flora SSSR (ref. 7).

15) Astragalus
A. christianus (2) Rydberg (1905), Hitchcock and Green (1929, 1935), Rehder (1949), Phillips (1951), Farr et al. (1979)
A. onobrychis (22) Britton and Brown (1913), Rydberg (1929a)

Comments: Rydberg (1929a) stated “The historical type is probably Astragalus christianus L., but A. onobrychis L. should be regarded as the nomenclatural type according to the American Code”, suggesting that, for some reason, he thought his first choice of type was not acceptable under the American Code. (Rydberg (1905) said “As the type, I regard A. christianus L. which was an article of food in the desert regions of Syria and the Holy Land”). Despite Post’s use of “Subser. Phaca” neither species is referable to the Phaca group as that is generally understood (e.g. by Chater, 1968).

Effect of Prop. 297 (Amer. Code priority): None, because Rydberg’s (1905) lectotypification, presumably also influenced by the American Code, predates that of Britton and Brown (1913).

Effect of Prop. 291 (1935 start): None.

16) Atriplex
A. hastata (6) Hitchcock and Green (1929, 1935), Ulbrich (1934), Rehder (1949), Phillips (1951)

Comments: McNeill et al. (1983) accepted Hitchcock and Green's (1935) lectotypification by A. hastata as superseding Britton and Brown's (1913) choice. They argued, however, that Hitchcock and Green's choice is "in serious conflict with the protologue" and that A. hortensis is an element that "is available and is not in conflict" (Art. 8.1), and proceed to designate A. hortensis as lectotype. Effect of Prop. 297 (Amer. Code priority): None, as the American Code lectotypification accords with the infrageneric names used in the most recent treatment by McNeill et al. (1983) and Bassett et al. (1983).

Effect of Prop. 291 (1935 start): None, if the McNeill et al. (1983) supersession of the Hitchcock and Green (1935) choice is accepted, but if the supersession were to be disputed the infrageneric nomenclature referred to would change.

17) Baccharis
   B. ivaefolia (1) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923-1926)
   B. halimifolia (4) Hitchcock and Green (1929, 1935), Rehder (1949), Farr et al. (1979)
   B. ivaefolia: Conyza (as C. ivaefolia (L.) Less.): refs. 8, 12.
   B. halimifolia: Baccharis: refs. 1, 3-4, 6-7, 11-12, 15, 17-18.

Comments: Baccharis ivaefolia is a long unused name, being generally referred to Conyza as C. ivaefolia. Conyza Less. is conserved with C. chilensis K. P. J. Sprengel as type (Voss et al., 1983). Rickett and Stafleu (1960b) claimed that their listing of Marsea (type: B. ivaefolia), and not Baccharis, as a name to be rejected against the conserved Conyza "implies that the later choice of B. halimifolia as the lectotype of Baccharis . . . is now sanctioned and that this name remains available." This argument does not seem to be in accord with the current provisions of the Code, but in any case Marsea, with type B. ivaefolia, was dropped from the list of names rejected against Conyza in the Edinburgh Code (Lanjouw et al., 1966).

Effect of Prop. 297 (Amer. Code priority): Baccharis would have to be used for the 60 species now known as Conyza Lessing, and a new name would have to be adopted for the 400 species presently known as Baccharis.

Effect of Prop. 291 (1935 start): None.

18) Barleria
   B. prionitis (2) Britton and Brown (1913)
   B. cristata (4) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)
   B. prionitis: Barleria Subg. Priionitis: Clarke (1884); Barleria Sect. Priionitis: Nees von Esenbeck (1847), Lindau (1895); Barleria: refs. 6, 11, 15-16.

Comments: No recent treatments adopting an infrageneric classification of this genus of 230 species have been traced.

Effect of Prop. 297 (Amer. Code priority): Probably on infrageneric nomenclature, in that B. prionitis is not a member of the traditional "type" section of Barleria.

Effect of Prop. 291 (1935 start): None.

19) Bartsia
   B. viscosa (3) Britton and Brown (1913)
   B. alpina (4) Hitchcock and Green (1929, 1935), Farr et al. (1979)
   B. coccinea (1) Pennell (1930)
   B. alpina: Bartsia: refs. 1, 3, 6-7, 9-12.
   B. coccinea: Castilleja (as C. coccinea (L.) Spreng.): refs. 3-4, 10.

Comments: The name Bartsia has been conserved (Voss et al., 1983) with B. alpina as type.
Effect of Prop. 291 (1935 start): None, except that the conservation would be superfluous.

20) Bauhinia

B. aculeata (2) Britton and Wilson (1923–1926), Britton and Rose (1930)
B. divaricata (3) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)
B. aculeata: Bauhinia (as B. ungulata L.): Urban (1920–1921); Bauhinia (as B. aculeata L.): ref. 16.

Comments: No recent detailed infrageneric classification has been traced, that by Wunderlin, Larsen and Larsen in Polhill and Raven (1981) lacking detail in species allotment.
Effect of Prop. 291 (1935 start): As above.

21) Bignonia

B. radicans (10) Rehder (1913), Britton and Brown (1913)
B. unguis-cati (3) ?Bureau (1864), Schumann (1894), Hitchcock and Green (1929, 1935)
B. capreolata (7) Sprague (1922), Rehder (1949), Gentry (1972), Farr et al. (1979)
B. radicans: Campsis (as C. radicans Lour.): refs. 1, 3-4, 6-7, 10, 11, 18.
B. unguis-cati: Macfadyena (as M. unguis-cati (L.) A. H. Gentry): refs. 1, 6; Doxantha (as D. unguis Miers): ref. 2.
B. capreolata: Bignonia: refs. 3, 6, 11, 14, 16; Anisostichus (as A. capreolata (L.) Bureau): refs. 4, 18.

Comments: Gentry (1972) and Wilbur (1980) review the history of the lectotypification of Bignonia and give details of the relative acceptance of the three choices, universally regarded as belonging to three different genera. Wilbur (1980) argues that the first choice, that of B. unguis-cati by Bureau (1864), cannot be superseded under Art. 8, and to retain predominant current usage, proposes conservation of Bignonia with B. capreolata as type.

Although of little signification it would seem that Rehder (1913) predates Britton and Brown (1913). The latter was published on 7 June; the date of the former has not been established but the internal editorial matter is dated 1912, suggesting an early 1913 publication date.
Effect of Prop. 297 (Amer. Code priority): The proposed conservation, recommended by the Committee for Spermatophyta (Brummitt, 1983) and by the General Committee (Voss, 1986), would still be necessary.
Effect of Prop. 291 (1935 start): As above.

22) Briza

B. minor (1) Britton and Brown (1913), Britton (1918), Matthei (1975), Farr et al. (1979)
B. media (2) Hitchcock (1920, 1923), Hitchcock and Green (1929, 1935), Phillips (1951), Kerguélen (1975), Tsvelev (1976)

Comments: Among recent authors, Tsvelev (1976) and Kerguélen (1975) accepted B. media as the lectotype of Briza, and indeed Tsvelev chose B. minor as type of Section Brizella, one of the three sections that he recognized. Matthei (1975), however, accepted the Britton and Brown (1913) lectotypification because he claimed that, although Hitchcock (1923) selected B. media as the most frequent species and best known to Linnaeus, the original description obviously referred to B. minor and not B. media.
Effect of Prop. 291 (1935 start): None.

23) Bromus

B. secalinus (1) Shear (1900), Britton and Brown (1913), Britton (1918), Hitchcock

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B. sterilis (5) Hitchcock and Green (1929, 1935), Phillips (1951)

B. arvensis (6) Wagnon (1952), Soderstrom and Beam (1968), Pinto-Escobar (1981)


B. arvensis: Bromus Subgen. Zeobromus Series Macronthera: ref. 7; Bromus Sect. Zeobromus: ref. 3; Bromus Sect. Bromus: ref. 12, Tsvelev (1976), Soderstrom and Beam (1968), Smith (1985); Bromus: refs. 4, 6, 8, 10–11, Hubbard (1968).

Comments: Tournay (1961) notes that since Shear (1900), Hitchcock (1920), and Stapf (1928) had shown that Linnaeus's original concept of Bromus was based on the B. secalinus group, the choice of B. secalinus as lectotype by Hitchcock (1920) should be retained, and the subsequent choice of B. sterilis by Stapf (1928) and Hitchcock and Green (1929, 1935) should not be accepted, even though it reflected the then current usage, and arose from the implicit choice of B. sterilis as lectotype by Bertoloni (1833), Koch (1837), and Parlatore (1840). The nomenclatural history of Bromus is detailed by Smith (1970).

Effect of Prop. 297 (Amer. Code priority): None, so far as the most recent treatments are concerned.

Effect of Prop. 291 (1935 start): Change in the application of names at infrageneric rank for most recent authors, and at the generic rank for those who distinguish Anisantha (which would become Bromus) from Bromus sensu stricto (for which Serrafalcus appears to be the first available name).


Effect of Prop. 291 (1935 start): None.

25) Cactus

C. melocactus (2) Britton and Millspaugh (1920), Britton and Rose (1922), Britton and Wilson (1923–1926)

C. mammillaris (1) Hitchcock and Green (1929, 1935), Farr et al. (1979)

C. melocactus: Melocactus (as M. communis (Ait.) Link and Otto): refs. 1–2, 15; Cactus: ref. 14.

C. mammillaris: Mammillaria (as M. mammillaris (L.) Karst.): ref. 1; Cactus: ref. 14.

Comments: Hunt (1967, p. 458) and Dandy (1969) briefly outline the history of the usage of the name Cactus. They consider that the conservation of Mammillaria Haworth with M. simplex Haw. (= C. mammillaris L.) as lectotype, which includes Cactus as a homotypic rejected name, establishes “the official typification of Linnaeus’s name Cactus in the sense of Mammillaria Haworth, with C. mammillaris as lectotype” (Dandy, 1969). Despite the late Mr. Dandy’s authority as a nomenclaturalist, there is, in fact, nothing in the Code which provides for “official” lectotypification of rejected names. Fortunately, so far as generic names are concerned, this turns out not to matter, because the later conservation of Melocactus Link and Otto (conserved type: Cactus melocactus) over its earlier homonym Melocactus Boehmer (type: C. mammillaris), means that whichever lectotype is accepted, Cactus is homotypic with an already conserved generic name.

Mammillaria and Melocactus are, however, placed in different tribes, the former generally in the tribe...
Cacteae (or form Echinocactaceae), and the latter referred to Notocactaceae (Buchheim, 1966; Endler and Buxbaum, 1974), or Cereaeae (Gibson and Nobel, 1986). Subtribal nomenclature is also affected.

**Effect of Prop. 297 (Amer. Code priority):** Change in the application of the tribal and subtribal autonyms in Cactaceae. In addition, editorial changes would be required in Appendix III of the Code in that Cactus would become a nomenclatural synonym of Melocactus, and not of Mammillaria.

**Effect of Prop. 291 (1935 start):** None.

26) *Carex*

<table>
<thead>
<tr>
<th>Species</th>
<th>Authors and Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>C. pulicaris</em> (2)</td>
<td>Britton and Brown (1913), Britton (1918), Farr et al. (1979)</td>
</tr>
<tr>
<td><em>C. hirta</em> (13)</td>
<td>Hitchcock and Green (1929, 1935), Phillips (1951), Voss (1972a)</td>
</tr>
<tr>
<td><em>C. acuta</em> (28)</td>
<td>Mackenzie (1931)</td>
</tr>
</tbody>
</table>


**Comments:** Voss (1972a) suggested that because *C. pulicaris* was excluded early from Subgenus “Eucarex” (e.g. by Cosson and Germain, 1861), it was not a suitable lectotype. He indicated his preference for the choice by Hitchcock and Green (1929) of *C. hirta*.

**Effect of Prop. 297 (Amer. Code priority):** Subgenus *Primocarex* would become Subgenus *Carex* and Subgenus *Carex* (“Eucarex”) would require another name.

**Effect of Prop. 291 (1935 start):** None.

27) *Cerbera*

<table>
<thead>
<tr>
<th>Species</th>
<th>Authors and Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>C. manghas</em> (2)</td>
<td>Hitchcock and Green (1929, 1935), Huber (1983)</td>
</tr>
<tr>
<td><em>C. ahouai</em> (1)</td>
<td>Britton and Millspaugh (1920), Britton and Wilson (1923–1926)</td>
</tr>
<tr>
<td><em>C. thevetia</em> (3)</td>
<td>Britton (1918), Farr et al. (1979)</td>
</tr>
</tbody>
</table>

*C. manghas:* *Cerbera:* Merrill (1945), St. John (1973), Li et al. (1975), Huber (1983).


**Comments:** Heller and Stearn (1959) cite *C. manghas* L. as Britton’s (1918) choice of lectotype, but this is an error. Farr et al. (1979) give *C. thevetia* L. as the earliest choice, selected by Britton (1918) in *Flora Bermuda*. Britton (1918) does not cite a type in the usual Britton style (“Type species: . . .”) but says “Seven species or more, . . ., the following typical,” and goes on to list only *C. thevetia*. If Britton’s (1918) action is not considered a priorable lectotypification under Art. 8, the first available lectotype would be *C. ahouai* L. chosen by Britton and Millspaugh (1920). *Thevetia* L. is conserved against the homotypic *Ahouai* Miller, with the conserved type *T. ahouai* (L.) DC. (= *Cerbera ahouai* L.).

**Effect of Prop. 297 (Amer. Code priority):** If Britton’s (1918) reference to *C. thevetia* is considered the earliest choice, as is accepted by *Index nominum genericorum* (Farr et al., 1979), then *Cerbera* would have to replace *Thevetia* for the genus of 8–9 species for which that name is currently conserved. If however, this designation is not considered definite enough, *Cerbera* would be homotypic with the conserved *Thevetia* and, therefore, rejected against it. In either case a new name would be required for the 6 species currently considered to belong to *Cerbera*.

**Effect of Prop. 291 (1935 start):** None.

28) *Chaerophyllum*

<table>
<thead>
<tr>
<th>Species</th>
<th>Authors and Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>C. sylvestre</em> (1)</td>
<td>Britton and Brown (1913)</td>
</tr>
<tr>
<td><em>C. temulentum</em> (3)</td>
<td>Hitchcock and Green (1929, 1935), Farr et al. (1979)</td>
</tr>
</tbody>
</table>

*C. sylvestre:* *Anthriscus* (as *A. sylvestris* (L.) Hoffm.): refs. 3–4, 6, 10–13, Bertová (1984).

*C. temulentum:* *Chaerophyllum:* refs. 6–7, 12, Bertová (1984).
Comments: All recent authors consider Chaerophyllum sylvestre L. to be in the genus Anthriscus.

Effect of Prop. 297 (Amer. Code priority): Anthriscus would have to be called Chaerophyllum and a new name found for the genus of 40 species currently called Chaerophyllum.

Effect of Prop. 291 (1935 start): None.

29) Chenopodium

*C. rubrum* (3) Britton and Brown (1913), Britton (1918), Britton and Millspaugh (1920), Britton and Wilson (1923–1926), Scott (1978), Farr et al. (1979), Wilson (1984)

*C. album* (5) Hitchcock and Green (1929, 1935), Phillips (1951)


Effect of Prop. 297 (Amer. Code priority): Change in the general usage at the infrageneric level (e.g. by Uotila, 1973), prior to the publication of Scott’s (1978) synopsis.


30) Cleome

*C. gynandra* (2) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926)

*C. ornithopodioides* (6) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)

*C. gynandra*: Gynandropsis (as G. gynandra (L.) Briq.): ref. 16; Cleome: refs. 1, 6, 11, 15, 18.

*C. ornithopodioides*: Cleome: refs. 7, 11–12.

Comments: Gynandropsis DC. (1824) is conserved over Pedicellaria Schrank (1790), with G. pentaphylla DC. (= Cleome gynandra L.) as type.

Effect of Prop. 297 (Amer. Code priority): Cleome would become a homotypic synonym of Gynandropsis and, therefore, would be rejected against it (ICBN Art. 14.4). For those who segregate Gynandropsis, a new name would be required for the 150 species of Cleome sensu stricto; otherwise they would have to be transferred to Gynandropsis. Cleome would also require to be added to the names rejected against Gynandropsis in Appendix III of the Code.

Effect of Prop. 291 (1935 start): None.

31) Convolvulus

*C. sepium* (2) Britton and Brown (1913)

*C. arvensis* (1) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)

*C. sepium*: Calystegia (as *C. sepium* (L.) R. Brown): refs. 6, 11–12, 14, 18; Convolvulus Sect. Calystegia: ref. 3; Convolvulus: refs. 1, 4–5, 10.

*C. arvensis*: Convolvulus Sect. Strophocaulos: ref. 3; Convolvulus: refs. 1, 4–6, 9–12, 18.

Comments: Calystegia R. Br. is conserved over the homotypic Volvulus Medik., with C. sepium (L.) R. Br. (= Convolvulus sepium L.) as the conserved type.

Effect of Prop. 297 (Amer. Code priority): For those who accept Calystegia as distinct from Convolvulus, a new name would be required for the genus of 250 species currently called Convolvulus. For the rest, Convolvulus would require to be called Calystegia. An editorial change in the Code would also be required, adding the homotypic synonym Convolvulus to the names rejected against Calystegia.

Effect of Prop. 291 (1935 start): None.

32) Cordia

*C. glabra* (3) Britton and Wilson (1923–1926)

*C. sebestana* (2) Hitchcock and Green (1929, 1935), Phillips (1951)

*Effect of Prop. 297 (Amer. Code priority):* Apparently none, as recent treatments regard the alternative generic types as congeneric and no use of autonyms in infrageneric treatments has been traced.

*Effect of Prop. 291 (1935 start):* As above.

33) Coronilla

- C. valentina (3) Britton and Brown (1913), Farr et al. (1979)
- C. varia (6) Hitchcock and Green (1929, 1935), Rehder (1949), Schmidt (1979)

*Effect of Prop. 297 (Amer. Code priority):* Changes in nomenclature at the sectional level.

*Effect of Prop. 291 (1935 start):* None.

34) Cracca

- C. villosa (2) Britton and Brown (1913), Britton and Wilson (1923–1926), Farr et al. (1979)
- C. purpurea (4) Hitchcock and Green (1929, 1935)
- C. purpurea: Tephrosia (T. purpurea (L.) Pers.): refs. 6, 11, 15, Liogier (1967).

*Comments: Cracca L. was listed as a nomen rejiciendum against Tephrosia Persoon in the original list of conserved generic names approved at the Vienna Congress in 1905 (Briquet, 1906). The addition of Cracca Bentham. (type C. glandulifera Bentham) to the list of nomina generica conservanda at the Stockholm Congress (Lanjouw et al., 1952) makes Cracca L. unavailable, as noted by Rickett and Stafleu (1959c). The type of Tephrosia is T. villosa (= Cracca villosa). Vicia cracca L. is nomenclaturally independent and the basis Cracca Hill and of Vicia Sect. Cracca S. F. Gray.

*Effect of Prop. 297 (Amer. Code priority):* None because of the conservation of Cracca Bentham.

*Effect of Prop. 291 (1935 start):* As above.

35) Crepis

- C. tectorum (10) Britton and Brown (1913), Britton (1918)
- C. biennis (11) Hitchcock and Green (1929, 1935), Phillips (1951)
- C. tectorum: Crepis Sect. Mesophylion: ref. 12, Babcock (1947); Crepis: refs. 3–6, 9–11, 17.


*Effect of Prop. 291 (1935 start):* None.

36) Crotalaria

- C. lotifolia (8) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926), Polhill (1968), Farr et al. (1979)
- C. laburnifolia (10) Hitchcock and Green (1929, 1935), Phillips (1951)

*Comments: Polhill (1968) accepted C. lotifolia as the type of Crotalaria, designating C. laburnifolia as the lectotype of Section Grandiflorae. He explained that Linnaeus's description in *Genera plantarum*,...
ed. 5 (1754) fitted both C. lotifolia and C. laburnifolia, except for features of the calyx and fruit, which applied to C. lotifolia but not C. laburnifolia. He concluded that due to prior choice and the details of the original description of Crotalaria, C. lotifolia should be accepted as the type. He cited support of this choice by Ali (1966); it is, however, in conflict with earlier recognition of the typical section (e.g. by Senn, 1939).


37) Cucurbita
C. lagenaria (1) Britton and Wilson (1923–1926), Farr et al. (1979)
C. pepo (2) Hitchcock and Green (1929, 1935)
C. lagenaria: Lagenaria (as L. sicca (Molina) Standley): refs. 6–7 (as L. vulgaris Ser.), 11–12, 14–16, 18, Steyermark (1963), Alain (1964), Liogier (1965), Stewart (1972), Welsh and Moore (1973).
C. pepo: Cucurbita: refs. 1, 3, 6–8, 10–12, 14–16, 18, Steyermark (1963), Alain (1964), Welsh and Moore (1973).

Comments: Liogier (1965), in his nomenclatural changes to Britton and Wilson’s Flora of Porto Rico and the Virgin Islands (1923–1926), adopts Lagenaria sicca (Molina) Standley in place of Cucurbita lagenaria L.

Effect of Prop. 297 (Amer. Code priority): The 6 species in the genus Lagenaria would require to be called Cucurbita. A new name would be required for the genus of 20 species currently called Cucurbita.
Effect of Prop. 291 (1935 start): None.

38) Cytisus
C. hirsutus (5) Britton and Brown (1913), Farr et al. (1979)
C. sessilifolius (3) Hitchcock and Green (1929, 1935)
C. supinus (6) Rehder (1949)
C. hirsutus: Chamaecytisus (as C. hirsutus (L.) Link): ref. 12; Cytisus: ref. 1.
C. sessilifolius: Cytisus Subgen. Cytisus: ref. 12; Cytisus: ref. 1.
C. supinus: Chamaecytisus (as C. supinus (L.) Link): ref. 12; Cytisus: ref. 1.

Comments: The name Cytisus Desf. (type C. triflorus L’Her. nom. illeg. = C. villosus Pourret) has been recommended by the Committee for Spermatophyta (Brummitt, 1982) and the General Committee (Voss, 1986), for conservation over Cytisus L. because two of the previously designated lectotype species, C. hirsutus and C. supinus, are generally referred to Chamaecytisus (L.) Link (C. hirsutus was designated its lectotype by Rothmaler, 1944) and the third, C. sessilifolius is now regarded as only distantly related to the main group of Cytisus and, according to Polhill et al. (1978), should be included in a monotypic genus (Cytisophyllum) near Podocytisus and Laburnum.

Effect of Prop. 297 (Amer. Code priority): None, if Cytisus Desf. is conserved over Cytisus L.
Effect of Prop. 291 (1935 start): As above.

39) Daphne
D. gnidium (9) Britton and Brown (1913)
D. mezereum (1) Hitchcock and Green (1929, 1935), Rehder (1949)
D. laureola (5) Meyer (1843), Farr et al. (1979)
D. gnidium: Daphne Sect. Eudaphne [Ser.] Mezereum: Gilg (1894); Daphne: refs. 1, 12.
D. mezereum: Daphne Sect. Eudaphne [Ser.] Mezereum: Gilg (1894); Daphne Sect. Mezereum: ref. 7; Daphne: refs. 1, 3–4, 6, 10–13, 17.
D. laureola: Daphne Sect. Laureola: ref. 7; Daphne Sect. Eudaphne [Ser.] Laureola: Gilg (1894); Daphne: refs. 1, 6, 12.

Comments: Farr et al. (1979) accept Daphne laureola L. as the lectotype based on lectotypification by Meyer (1843). All three species that have been selected as type are generally regarded as referable to Daphne and no infrageneric treatment that adopts the autonym has been traced.

Effect of Prop. 297 (Amer. Code priority): If Meyer’s (1843) selection of D. laureola L. as lectotype is priorable under Art. 8, there would be no effect, as this would predate that by Britton and Brown.
Delphinium (1913). But even if it is unacceptable, no nomenclatural changes would probably arise, as *D. gniidium* and *D. mezereum* are included in the same series by Gilg (1894).

**Effect of Prop. 291 (1935 start):** *D. mezereum* would become the type which reflects Gilg's (1894) view of the typical section.

40) Delphinium

*D. consolida* (1) Britton and Brown (1913)

*D. peregrinum* (3) Hitchcock and Green (1929, 1935), Pawlowski (1963), Munz (1967a, 1967c)

*D. consolida*: Consolida (as *C. regalis* S. F. Gray): refs. 1, 6–7, 9–13, Davis (1965), Munz (1967b), St. John (1973), Futak and Bertová (1982); *Delphinium*: ref. 4.


**Comments:** Delphinium is one of the cases that led to the introduction at Seattle of the limitation of priority for American Code lectotypifications (see Rauschert, 1968; McVaugh, 1969, 1970a). It had originally been recommended for conservation prior to the Seattle Congress, but the Committee concluded thereafter that this was unnecessary as it would “presumably be possible to set aside the lectotypification made by Britton and Brown in 1913. A satisfactory lectotype . . . can then be proposed if this has not already been done.” Although since then all treatments have accepted *D. peregrinum* as type, this has apparently been done without any formal action of supersession beyond the designation by Green in Hitchcock and Green (1929). *Delphinium* appeared as an example of supersession of an “arbitrary selection” of a lectotype under Art. 8 in the Seattle and Leningrad Codes (Stafleu et al., 1972, 1978), but to some extent the example muddled the issue by referring to the fact that, although Linnaeus included *Delphinium* in his Polyandria Trigynia, *D. consolida* is unicarpellate, whereas *D. peregrinum* is tricarpellate. Despite this, as Rauschert (1968) noted, rejection on the grounds of “misinterpretation of the protologue” or of “serious conflict with the protologue” (its successor in the Sydney Code—Voss et al., 1983), is not possible because Linnaeus includes in the protologue the phrase: “Germina tria vel unum”.

**Effect of Prop. 297 (Amer. Code priority):** The 40 or so species of Consolida would have to be referred to Delphinium and a new name (probably *Phledenium*) adopted for the 300 or more species currently included in *Delphinium* sensu stricto.

**Effect of Prop. 291 (1935 start):** None.

41) Dioscorea

*D. sativa* (6) Britton and Brown (1913), Britton (1918), Bullock (1959), Farr et al. (1979)

*D. bulbifera* (5) Hitchcock and Green (1929, 1935), Phillips (1951)

*D. sativa*: (as *D. villosa* L.—see below): Dioscorea Subgen. Eudioscorea Sect. Macropoda: ref. 2, Knuth (1924); Dioscorea: refs. 1, 3–4, 6, 10–11, Liogier (1965).


**Comments:** Prain and Burkill (1919) give a very full and still nomenclaturally relevant account of the application of *D. sativa* L. They consider that there were six elements in Linnaeus’s protologue. These they refer to as *D. sativa* L. [1], [2], [3], etc. They consider numbers 2–6 to refer to *Tinospora cordifolia* Miers, *Dioscorea esculenta* (Lour.) Burkill, *D. martinicensis* Sprengel (= *D. alata* L.), *D. cayenensis* Lam. and *Cardiopetis rumpphi* Baillon (= *C. lobata* R. Br.), respectively. Although they believe that Linnaeus intended to apply the name either to the species now known as *D. esculenta* or that known as *D. cayenensis*, they accept the view of Lamarck (1789), enunciated more formally by Hooker (1892) (“the plant figured in ‘Hortus Cliffortianus’ must be accepted as sativa Linn., it being cited by himself as his type”), that the name must be based on element number 1. This they consider to be a “chimaera”, representing the stem and leaves of *D. villosa* L. and the fruiting spike and prickles of *D. chondrocarpa* Griseb. (= *D. altissima* Lam.). Prain and Burkill (1919) concluded that the name should not be used due to the ambiguity of its typification. Knuth (1930), Prain and Burkill (1936) and Burkill (1954) all cite *D. sativa* L. pro parte as a synonym of *D. esculenta* (Lour.) Burk. Knuth
(1924, 1930) notes that *D. sativa* has generally been misapplied to *D. bulbifera*. Punt (Stafleu, 1964) includes *D. sativa* as a nomen ambiguum in the list of "names for which a change is necessary and has already been effected", with four replacement names (*D. esculenta* (Lour.) Burk., *D. cayenensis* Lam., *D. villosa* L., and *D. chondrocarpa* Griseb.) listed.

As there is no longer any specific provision in the Code to reject "nomina ambigua" that are not clearly typified, and as no formal review of the status of *D. sativa* seems to have been published since Punt’s review, we consider it desirable to formally lectotypify the name by the stem and leaves figured in *Hortus cliffortianus* tab. 28, identified by Prain and Burkill (1919) as *D. villosa*, an identification which has never been disputed. We accordingly treat *D. sativa* L. (1753) as a synonym of *D. villosa* L. (1753), thus ensuring that the name need not be restored for any species of *Dioscorea*.

**Effect of Prop. 297 (Amer. Code priority):** Apparently none as no infrageneric treatment using autonyms has been traced.

**Effect of Prop. 291 (1935 start):** As above, except that Knuth’s (1924, 1930) subgenus *Eudioscorea* would no longer be typical.

42) *Dolichos*

*D. lablab* (1) Britton (1918), Britton and Wilson (1923–1926), Hitchcock and Green (1929), Farr et al. (1979)

*D. biflorus* (12) Hitchcock and Green (1935), Rehder (1949), Phillips (1951)

*D. trilobus* (7) Verdcourt (1968, 1970a)

*D. lablab*: Lablab (as *L. niger* Medik.): refs. 11, 16, Wilczek (1954), Leon and Alain (1953), Liogier (1967); Lablab (as *L. purpureus* (L.) Sweet): Verdcourt (1970b, 1971); *Dolichos*: refs. 1, 3–4, 6, 10, 15, 17, Small (1933).


**Comments:** Verdcourt (1965) considered “that *D. lablab* can be looked on as the historic type”, and noted that the later suggestion of *D. biflorus* as type was due to the recognition that *D. lablab* belongs to a small genus distinct from *Dolichos*. He noted, however, that because the type of *D. biflorus* is, in fact, referable to *Vigna unguiculata* (Brenan, 1954), its maintenance as type of *Dolichos* would be extremely disruptive nomenclaturally. His revised proposal (Verdcourt, 1968, 1970a) to conserve *D. trilobus* L. as the type of *Dolichos* L. was eventually accepted (McVaugh, 1972; Voss et al., 1983), but not without strong opposition (cf. Westphal, 1975).

**Effect of Prop. 297 (Amer. Code priority):** None, since *Dolichos* is conserved with *D. trilobus* as type.

**Effect of Prop. 291 (1935 start):** As above.

43) *Draba*

*D. verna* (2) Britton and Brown (1913)


*D. verna*: Erophila (as *E. verna* (L.) DC.): refs. 6–7, 9, 11, 15–16, 18, Schulz (1927), Hewson (1982); *Draba*: refs. 3–5, 10–11, Small (1933), Fernald (1934), Mulligan (1976).

*D. incana*: Draba Sect. Leucodraba: Schulz (1927), Mulligan (1976); *Draba Series Incanae*: ref. 7; *Draba*: refs. 1, 3–4, 6, 9–12, Fernald (1934), Hewson (1982).

**Comments:** *D. verna* is the basionym of *Erophila verna* (L.) DC. (1821), the type of the conserved name *Erophila* (Rickett and Stafleu, 1959c). Rickett and Stafleu (1959c) note that this conservation “implies that the later choice of *Draba incana* Linnaeus, proposed by M. L. Green (Prop. Brit. Bot. Bot. 170. 1979) is now to be maintained”. There is however no provision in the Code for such vicarious conservation of a type of a name that is not, itself, conserved.

**Effect of Prop. 297 (Amer. Code priority):** *Erophila* and *Draba* would be homotypic synonyms so that *Draba* would be rejected against the conserved *Erophila*. For the majority of recent authors who maintain the two genera, another generic name (possibly *Consana* Adanson) would have to be found for the 250 or so species of *Draba*; for the rest, *Erophila* would replace *Draba* sensu lato.

**Effect of Prop. 291 (1935 start):** None.
Dracocephalum:
Heller and Stearn (1959) suggest that Britton and Millspaugh (1920) proposed *D. ruyschiana* as the type of *Dracocephalum*, whereas *D. virginianum* was designated by Britton and Brown (1913) and Hitchcock and Green (1929). This appears to be a typographical error and probably refers to Mc-Clintock's (1949) selection of *D. ruyschiana*. *Dracocephalum* has in any case been conserved with *D. moldavica* as type (Sealy, 1954; Rickett, 1960).

44) Duranta
*D. repens* (1) Britton (1918), Britton and Wilson (1923–1926)
*D. erecta* (2) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)
*D. repens*: Duranta: refs. 1, 6, 11, 14–16, Urban (1920–1921), Small (1933).

Comments: Leon and Alain (1957) and Gooding et al. (1965) treat *D. erecta* as a synonym of *D. repens*, but, in fact, *D. erecta* is the correct name, as the two species were first combined by Hier in 1877 who adopted this name (Bromley, 1984).

*Effect of Prop. 297 (Amer. Code priority):* None in view of the apparent conspecificity of the species whose names provide the potential types.

*Effect of Prop. 291 (1935 start):* As above.

45) Echium
*E. italicum* (2) Britton and Brown (1913), Gibbs (1971), Farr et al. (1979)
*E. vulgare* (3) Hitchcock and Green (1929, 1935), Phillips (1951)
*E. italicum*: Echium Sect. Schizostigma Series Italica: ref. 7; Echium Sect. Italica Series Italica: Klotz (1960); Echium: refs. 8, 12, Lacaita (1919), Fiori (1923–1929).
*E. vulgare*: Echium Sect. Schizostigma Series Vulgaria: ref. 7; Echium Sect. Echium Series Echium: Klotz (1960); Echium: refs. 1, 3–6, 8, 10–12, 18, Lacaita (1919), Fiori (1923–1929), Small (1933), Coutinho (1939).


*Effect of Prop. 291 (1935 start):* None.

46) Elymus
*E. arenarius* (1) Britton and Brown (1913), Britton (1918)
*E. sibiricus* (2) Hitchcock (1920, 1923), Hitchcock and Green (1929, 1935), Phillips (1951)
*E. arenarius*: Leymus Sect. Leymus (as *L. arenarius* (L.) Hochst.): Tsvelev (1976), Löve (1984); Leymus: refs. 9, 12, Dewey (1984); Elymus Sect. Psammelymus: ref. 3; Elymus: refs. 1, 6, 10–11, 13.

Comments: Most agrostologists now recognize that traditional generic delimitation within the Triticeae is very unnatural and place the alternative types of *Elymus* in separate genera. Nevski (1934) in *Flora SSSR* treated *E. arenarius* as the type of *Elymus* and used Clinelymus for the genus exemplified by *E. sibiricus*. Perhaps under the influence of Hitchcock and Green's (1935) list of lectotypes, or perhaps because of Hochstetter's earlier recognition of *E. arenarius* as the basis of his new genus *Leymus*, this situation was then reversed and current usage consistently typifies *Elymus* by *E. sibiricus* and refers *E. arenarius* to *Leymus*. The current Ex. 1 to Art. 8 of the Code (Voss et al., 1983) describes this situation (see also McNeill and Pryer, 1985).

*Effect of Prop. 297 (Amer. Code priority):* The 50 or so species currently referred to *Leymus* would have to be called *Elymus* and *Elymus sensu stricto* would require a new name, perhaps Clinelymus.

*Effect of Prop. 291 (1935 start):* None.

47) Erigeron
*E. acris* (6) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926)
E. uniflorus (8) Hitchcock and Green (1929, 1935), Phillips (1951)

E. acris: Trimorpha Sect. Brachyglossae (as T. acris (L.) Cass.): Vierhapper (1906); Erigeron Subgen. Trimorpha Sect. Brachyglossae: ref. 7; Erigeron Sect. Trimorphaea: ref. 3, Cronquist (1947); Erigeron: refs. 1, 4–6, 8–12.


Comments: Linnaeus treated Erigeron as neuter (e.g. E. acre, E. uniflorum), but in accordance with Rec. 75A Ex. 1 (Voss et al., 1983) we have corrected the epithets to the masculine form. Cronquist (1947) noted that it was clear from the description in Genera plantarum "that Linnaeus considered E. uniflorus the basic species of the genus around which the others were grouped", and that "it necessarily becomes, then, the type of the genus". He considered this an unfortunate choice because it is really intermediate between the two largest sections.

Effect of Prop. 297 (Amer. Code priority): Change in usage at the infrageneric level (e.g. by Cronquist, 1947), and, for any who would follow Vierhapper (1906) in accepting Trimorpha, adoption of Erigeron for that group of species and the need for a new name for Erigeron sensu stricto.

Effect of Prop. 291 (1935 start): None.

48) Erysimum

E. officinale (1) Britton and Brown (1913), Britton (1918)

E. cheiranthoides (4) Hitchcock and Green (1929, 1935), Schulz (1936), Farr et al. (1979), Hewson (1982)


Comments: Of Linnaeus's original four species, Scopoli (1772) retained only E. cheiranthoides in Erysimum (along with 4 other species). He transferred the other three original Linnaean species to Sisymbrium L. This action has sometimes been considered to be effectively a lectotypification (e.g. by Farr et al., 1979). This is, however, very questionable under the present wording of Art. 8.

Alliaria officinalis Andr. ex Bieb. (=Sisymbrium alliaria (L.) Scop. = Alliaria petiolata (Bieb.) Cavara et Grande) is an independent name, as is Nasturtium officinale R. Br. (=Sisymbrium nasturtium-aquaticum).

Effect of Prop. 297 (Amer. Code priority): Erysimum would have to be applied to the genus called Sisymbrium in most recent works. Erysimum as currently recognized would require another name (probably Cheirinia Link). [The name Sisymbrium, would, in any case, refer, as a synonym, to Rorippa or Nasturtium (depending on taxonomic treatment)—see below.]

Effect of Prop. 291 (1935 start): None.

49) Fevillea

F. cordifolia (1) Britton and Wilson (1923–1926), Farr et al. (1979), Hutchinson (1964–1967)

F. trilobata (2) Hitchcock and Green (1929, 1935)

F. cordifolia: Fevillea: refs. 6, 11, 15, Cogniaux (1916), Fawcett and Rendle (1926), Alain (1964), Moscoso (1943).


Effect of Prop. 297 (Amer. Code priority): None; no infrageneric taxa appear to have been proposed in this small genus of about 9 species.

Effect of Prop. 291 (1935 start): As above.

50) Filago

F. pygmaea (1) Britton and Brown (1913)

F. pyramidata (3) Hitchcock and Green (1929, 1935), Farr et al. (1979)

F. pyramidata: Filago Sect. Filago: Meikle (1985); Filago (as F. spathulata): ref. 8, Coutinho (1939); Filago (as F. pyramidata): refs. 12–13.

Comments: Gaertner (1791) established Evax based on F. pygmaea, restricting Filago to F. pyramidata, F. germanica and related species. This circumscription of Filago has been generally accepted. According to Chrtek and Holub (1963) F. pygmaea is, however, the only species which completely corresponds to the protologue. Consequently they applied Filago to Evax and adopted Gifola, Oglifa, and Gifolaria for the various segregates that they recognized within Filago in its traditional usage. To maintain current usage, Buchheim and Wagenitz (1964) proposed that Filago be conserved with F. pyramidata as type. This has been accepted (McVaugh, 1967).

Effect of Prop. 297 (Amer. Code priority): None, because of conservation with F. pyramidata as type.

Effect of Prop. 291 (1935 start): None, except that conservation would no longer be necessary.

51) Fritillaria

F. pyrenaica (4)Britton and Brown (1913), Grove (1931)
F. meleagris (5) Hitchcock and Green (1929, 1935)
F. pyrenaica: Fritillaria: refs. 1, 12.
F. meleagris: Fritillaria Sect. Eufrillaria: ref. 2; Fritillaria: refs. 1, 7–8, 12, Grove (1931).

Comments: This is one of the few cases in which a lectotypification in the period 1931–1934, that conflicts with that of Hitchcock and Green (1929, 1935), has been traced.

Effect of Prop. 297 (Amer. Code priority): Probably none as the alternative genotypies are closely related and would fall within the typical section as recognized by Krause (1930).

Effect of Prop. 291 (1935 start): None.

52) Gerardia

G. tuberosa (1) [Smith (1810) ?], Pennell (1913), Britton and Brown (1913), Britton and Wilson (1923–1926), Pennell (1930), Farr et al. (1979)
G. purpurea (2) Hitchcock and Green (1929, 1935), Pennell (1935)
G. purpurea: Agalinis (as A. palustris Raf.): refs. 1, 6, 11, 15, 17, Small (1933); Gerardia Subgen. Eugerardia sect. Chytra: ref. 3; Gerardia: refs. 4, 10, 18.

Comments: The first lectotypification has been attributed to Smith (1810), who said of G. tuberosa “the plant must be the true, though it were the only Gerardia, and the next in that case must have a new generic appellation and character” (Thieret, 1956). This is somewhat questionable as a priorizable lectotypification, but Pennell (1913) is much more explicit (“Gerardia tuberosa L. must be considered the type of the genus Gerardia (Plumier) Linnaeus.”), going on in a footnote to say that he reached this conclusion independently of N. L. Britton. Pennell’s lectotypification was published on April 7, 1913, and Britton’s on June 7, 1913. He later notes (Pennell, 1930) that “no species has the curious corolla described [by Linnaeus for Gerardia], G. tuberosa nearly answers the description” whereas the other original species all differ in some other features.

Stenandrium Nees with type S. mandioccanum was conserved (Thieret, 1956; Rickett, 1958; Voss et al., 1983) over Gerardia L., with G. tuberosa (Acanthaceae) cited as type. This is generally taken as establishing the typification of the name (although the Code does not specifically provide for establishment, far less conservation, of types of names rejected under Art. 14), and hence as making Gerardia unavailable for use in the Scrophulariaceae. Agalinis Raf., with the type A. palustris Raf., was conserved at the same time over Chytra Gaertn. f., with the type C. anomala Gaertn. f. (Thieret, 1958; Rickett, 1961), for scrophulariaceous “gerardias”. Attempts were made to retain Gerardia for use in the Scrophulariaceae, in view of the acceptance by authors such as Pennell (1935) (albeit “under protest”) of the Hitchcock and Green (1935) typification endorsed by the Cambridge International Botanical Congress (cf. St. John, 1957). The proposal by Morton (1959) to conserve Gerardia with G. purpurea as type was not, however, accepted by the Committee for Spermatophyta (Rickett, 1961) on the grounds that Agalinis had already come into use.

Effect of Prop. 291 (1935 start): None, because *A. palustris* Raf., the conserved type of *Agalinis*, is homotypic with *G. purpurea*.

53) *Glycine*

*G. apios* (1) Britton and Brown (1913)

*G. javanica* (6) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)

*G. apios*: *Apios* (as *A. americana* Medik.): refs. 1, 3–4, 6, 10–12, 16, 18; *Glycine*: Small (1933).


Comments: *G. apios* L. is homotypic with *Apios americana* Medik., the type of the conserved name *Apios Fabricius* (Rickett and Stafleu, 1959c). This led Rickett and Stafleu (1959c) to say “The earlier choice of a lectotype for the genus *Glycine* by Britton and Brown (1913) (who chose *G. apios*) was rejected by this conservation in favour of Green’s choice of *G. javanica*”. Consequently, when it was found that the holotype of *G. javanica* was actually a specimen of *Pueraria montana* (Lour.) Merrill, and since all of the other species that Linnaeus had included in *Glycine* had since been placed in other genera, Verdcourt (1966) proposed the conservation of *Glycine* Willd. with *G. clandestina* Wendl. as type. This has been accepted (McVaugh, 1968b; Voss et al., 1983).


Effect of Prop. 291 (1935 start): As above.

54) *Glycyrrhiza*

*G. echinata* (1) Britton and Brown (1913), Farr et al. (1979)

*G. glabra* (2) Hitchcock and Green (1929, 1935)

*G. echinata*: *Glycyrrhiza* Series *Echinatae*: ref. 7; *Glycyrrhiza*: ref. 12.

*G. glabra*: *Glycyrrhiza* Series *Glabrae*: ref. 7; *Glycyrrhiza*: refs. 6, 8, 11–12, Coutinho (1939).

Comments: No recent treatments at the infrageneric level using the autonym have been traced.

Effect of Prop. 297 (Amer. Code priority): Apparently none, as no infrageneric use of autonyms has been traced.

Effect of Prop. 291 (1935 start): As above.

55) *Gnaphalium*

*G. luteo-album* (7) Britton and Brown (1913), Britton and Wilson (1923–1926)


*G. luteo-album*: *Pseudognaphalium* Subgen. *Laphangium* (as *P. luteo-album* (L.) Hilliard et B. L. Burtt); Hilliard and Burtt (1981a), Meikle (1985); *Pseudognaphalium*: Hilliard and Burtt (1981 b); *Gnaphalium* Subgen. *Gnaphalium* Sect. *Calolepis*: ref. 7; *Gnaphalium*: refs. 5–6, 8, 12, 15, Guinea Lopez and Ceballos Jimenez (1974).


Comments: Recent treatments (Holub, 1976; Hilliard and Burtt, 1981a, 1981b) segregate the alternative generic types into separate genera. Holub (1976) refers *G. uliginosum* to *Filaginella*, whereas Hilliard and Burtt (1981a, 1981b) and Hilliard (1981) accept the species name as indicating the type of *Gnaphalium*, and use *Pseudognaphalium* Kirpichnikov for the genus of some 10 species that includes *G. luteo-album*. Jeffrey (1979) formally rejected the Britton and Brown lectotypification and accepted *G. uliginosum* as type “in the interests of nomenclatural stability”.


Effect of Prop. 291 (1935 start): For those who follow Holub (1976) in segregating *G. uliginosum* as *Filaginella*, change of its name to *Gnaphalium* and adoption of a new name for the 10 or so species currently included by him in *Gnaphalium* sensu stricto.
56) Gossypium


G. herbaceum (1) Hitchcock and Green (1929, 1935), Prokhanov (1947), Hutchinson (1947), Phillips (1951), Hu (1955)


Effect of Prop. 297 (Amer. Code priority): None, as in most recent taxonomic treatments (e.g. Hutchinson, 1947; Fryxell, 1968, 1969) both species fall in the same section.

Effect of Prop. 291 (1935 start): As above.

57) Hibiscus

H. trionum (20) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926)


H. malvaviscus (8) [? Miller, 1754—cf. Bakhuizen van den Brink et al., 1966]


H. syriacus: Hibiscus Sect. Trionum: ref. 7; van Borssum Waalkes (1966); Hibiscus: refs. 1, 3–4, 11–13, 18, Small (1933), Hu (1955).

H. malvaviscus: Malvaviscus (as M. arborescens Cav.): ref. 15, Liogier (1965), van Borssum Waalkes (1966).

Comments: On the grounds that, by restricting Hibiscus to H. malvaviscus L., Miller (1754) lectotypified the name, Bakhuizen van den Brink et al. (1966) proposed Hibiscus for conservation with H. syriacus as type. This was accepted.

Effect of Prop. 297 (Amer. Code priority): None (conserved name).

Effect of Prop. 291 (1935 start): None, except to make the conservation unnecessary.

58) Holcus

H. sorghum (1) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926)

H. lanatus (4) Hitchcock and Green (1929, 1935), Phillips (1951), Rehder (1949), Farr et al. (1979)

H. sorghum: Sorghum Series Vulgariae (as S. vulgare Pers.): ref. 7; Sorghum (as S. bicolor (L.) Moench): refs. 1, 6; (as S. halepense (L.) Pers.): ref. 18; (as S. saccharatum (L.) Moench): ref. 16, Liogier (1965); (as S. vulgare): refs. 3, 10–11, 17.

H. lanatus: Holcus: refs. 1, 3–8, 10–12, 15, 18.

Comments: Both Holcus L. and Sorghum Moench are conserved names, the former with H. lanatus L. as type, and the latter (type S. bicolor (L.) Moench) over the earlier Sorghum Adanson (=Holcus L.).

Effect of Prop. 297 (Amer. Code priority): None, due to conservation.

Effect of Prop. 291 (1935 start): None, except that the conservation would not, presumably, be necessary.

59) Hypochaeris

H. glabra (5) Britton and Brown (1913), Vasiliev (1964)
H. radicata (6) Hitchcock and Green (1929, 1935), Farr et al. (1979)
H. glabra: Hypochaeris Sect. Hypochaeris: ref. 7; Hypochaeris: refs. 5–6, 8, 10–12, 15, 18, Small (1933), Coutinho (1939).
H. radicata: Porcellites (as P. radicata (L.) Cass.): ref. 8; Hypochaeris Sect. Porcellites: ref. 7; Hypochaeris: refs. 1, 3–5, 10–12, 15, 18, Small (1933), Coutinho (1939).

Effect of Prop. 291 (1935 start): For those who segregate Porcellites, this group of about 3 species would have to be called Hypochaeris and another name found for the equally small group retained in Hypochaeris sensu stricto.

Iva
I. annua (1) Britton and Brown (1913), Farr et al. (1979)
I. frutescens (2) Hitchcock and Green (1929, 1935), Rehder (1949)
I. annua: Iva Sect. Iva: Jackson (1960); Iva: refs. 6, 11, 18.
I. frutescens: Iva Sect. Euiva: ref. 3; Iva Sect. Iva: Jackson (1960); Iva: refs. 4, 6, 10–11, 18, Small (1933).

Effect of Prop. 297 (Amer. Code priority): None, as both species are referred to the same section.
Effect of Prop. 291 (1935 start): As above.

Jatropha
J. urens (6) Britton (1918)
J. curcas (3) Hitchcock and Green (1929, 1935), Phillips (1951)
J. manihot (5) Mackenzie (1929)
J. gossypifolium (1) McVaugh (1944), Webster (1967), Dehgan and Webster (1979)

Comments: Mackenzie (1929) proposed J. manihot as lectotype of Jatropha as he considered that Linnaeus based his generic description solely on that species. McVaugh (1944) disputed this (cf. also Wilbur, 1980), and proposed J. gossypifolium as the lectotype, on the grounds that it agreed well with the protologue and that it was one of the three Linnaean species that were still generally included in Jatropha. He noted that one of the other two, J. curcas, was the basis of Curcas Adanson, even although that genus was not generally recognized.
Effect of Prop. 297 (Amer. Code priority): Jatropha would have to be applied to the genus of about 50 species now known as Cnidoscolus, and a new name (?? Curcas) found for the 150 or so species currently referred to Jatropha.
Effect of Prop. 291 (1935 start): None.

Justicia
J. adhatoda (1) Britton (1918), Britton and Wilson (1923–1926), Wasshausen and Smith (1969), Farr et al. (1979)
J. hyssopifolia (4) Hitchcock and Green (1929, 1935), Phillips (1951)

**Comments:** Although 19th century authors (e.g. Nees von Esenbeck, 1847) segregated *Adhatoda* based on *J. adhatoda*, their concept of that genus also included *J. hyssopifolia*! More recent workers (e.g. Durkee, 1978) generally retain a broad circumscription of the genus.

**Effect of Prop. 297 (Amer. Code priority):** Probably none.

**Effect of Prop. 291 (1935 start):** Probably none.

63) *Lamium*

- *L. purpureum* (2) Britton and Brown (1913), Britton (1918)
- *L. album* (1) Hitchcock and Green (1929, 1935)

**Comments:** Dumortier (1827) included *L. album* (along with *L. maculatum* L.—1762) in his Sect. *Lamiotypus*, segregating *L. purpureum* in Sect. *Lamiopsis*.

**Effect of Prop. 297 (Amer. Code priority):** Although no infrageneric treatment using autonyms has been traced, there would be a change in the traditional usage at the sectional level.

**Effect of Prop. 291 (1935 start):** None.

64) *Lantana*

- *L. camara* (3) Britton (1918), Britton and Wilson (1923–1926)
- *L. trifolia* (1) Hitchcock and Green (1929, 1935), Phillips (1951)

**Effect of Prop. 297 (Amer. Code priority):** Apparently none, as recent treatments regard the alternative generitypes as congeneric and no use of autonyms in infrageneric treatments has been traced.

**Effect of Prop. 291 (1935 start):** As above.

65) *Lathyrus*

- *L. sativus* (5) Britton and Brown (1913)

**Comments:** Kupicha (1983) prefers *L. sylvestris* as type because “*L. sativus* is the type of the segregate genus *Cicercula* Medik. (1787), whereas *L. sylvestris* has invariably been treated as part of sect. *Lathyrus* (*Eulathyrus*).” Kupicha (1983) has recently combined Subgenus *Cicercula* (type *L. sativus*) with Subgenus *Lathyrus* (type *L. sylvestris*).

**Effect of Prop. 297 (Amer. Code priority):** Change in general usage at subgeneric or sectional level in this genus of about 130 species.

**Effect of Prop. 291 (1935 start):** None.

66) *Lemna*

- *L. trisulca* (1) Britton and Brown (1913), Britton (1918), Britton and Millspaugh (1920), Britton and Wilson (1923–1926), Farr et al. (1979)
L. minor (2) Hitchcock and Green (1929, 1935)
L. minor: Lemna Subgen. Hydrophace Sect. Eulemna: Engler (1889); Lemna Subgen. Lemna: ref. 12; Lemna: refs. 1, 3-11, 13-14, 17, 18.

Comments: L. minor is also the type of Lenticularia Friche-Joset et Montandon, published in 1856 (Farr et al., 1979).
Effect of Prop. 297 (Amer. Code priority): Change in usage at infrageneric level.
Effect of Prop. 291 (1935 start): None.

67) Leontodon
L. taraxacum (1) Britton and Brown (1913), Britton (1918)
L. hispidus (6) Hitchcock and Green (1929, 1935)
L. hispidus: Leontodon (as L. hastilis L. var. vulgaris Koch): ref. 3; Leontodon Subgen. Leontodon: refs. 7; Leontodon Sect. Leontodon: ref. 12; Leontodon: refs. 4, 6, 8, 10-11.

Comments: Leontodon is conserved with L. hispidus as type, and T. officinale Weber, homotypic with L. taraxacum, is the conserved type of Taraxacum Wiggers (McVaugh, 1970b; Voss et al., 1983).
Effect of Prop. 297 (Amer. Code priority): None, due to conservation of L. hispidus as type of Leontodon.
Effect of Prop. 291 (1935 start): As above.

68) Lobelia
L. dortmanna (3) Britton and Brown (1913), Britton and Wilson (1923-1926)
L. cardinalis (10) Hitchcock and Green (1929, 1935), Phillips (1951)

Effect of Prop. 297 (Amer. Code priority): Probably none, as the two species are included in the same section by Wimmer (1953), and, although in different series, no autonym usage has been traced.
Effect of Prop. 291 (1935 start): As above.

69) Lunaria
L. annua (2) Britton and Brown (1913)
L. rediviva (1) Hitchcock and Green (1929, 1935), Schulz (1936)
L. annua: Lunaria: refs. 1-6, 10-13.

Effect of Prop. 297 (Amer. Code priority): None. Lunaria is generally regarded as a genus of only 3 species (Schulz, 1936; Airy Shaw, 1973), to which both competing types belong.
Effect of Prop. 291 (1935 start): As above.

70) Lythrum
L. salicaria (1) Britton and Brown (1913)
L. hyssopifolia (5) Hitchcock and Green (1929, 1935), Phillips (1951)
L. salicaria: Lythrum Subgen. Salicaria: Koehne (1881, 1903); Lythrum: refs. 1, 3-4, 6, 10-13, Borja Carbonell (1968).

Effect of Prop. 297 (Amer. Code priority): Possibly on infrageneric nomenclature, but no autonym usage has been traced.
Effect of Prop. 291 (1935 start): As above.

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71) Melampyrum

M. arvense (2) Britton and Brown (1913), Pennell (1930), Farr et al. (1979)
M. pratense (4) Hitchcock and Green (1929, 1935)


72) Melochia

M. corchorifolia (4) Britton and Wilson (1923–1926), Farr et al. (1979)
M. pyramidata (1) Hitchcock and Green (1929, 1935)


Effect of Prop. 291 (1935 start): Change in infrageneric nomenclature adopted by Goldberg (1967) and return to Schumann’s (1895) view of the typical section.

73) Mercurialis

M. annua (2) Britton (1918)
M. perennis (1) Britton and Brown (1913), Hitchcock and Green (1929, 1935), Farr et al. (1979)

M. annua: Mercurialis: refs. 2–4, 6–8, 10–12, 15.
M. perennis: Mercurialis: refs. 2, 7–8, 12.

Effect of Prop. 297 (Amer. Code priority): None; no infrageneric treatment of this genus of 8 species has been traced.
Effect of Prop. 291 (1935 start): As above.

74) Mimosa

M. pudica (14) Hitchcock and Green (1929, 1935), Phillips (1951)


Effect of Prop. 297 (Amer. Code priority): Apparently none, as both species are included in the same section in Taubert’s (1894) treatment.
Effect of Prop. 291 (1935 start): As above.

75) Momordica

M. charantia (2) Hitchcock and Green (1929, 1935), Phillips (1951)

M. charantia: Momordica: refs. 1, 6, 11, 15–17, Cogniaux and Harms (1924), Telford (1982).

Effect of Prop. 297 (Amer. Code priority): Apparently none; no infrageneric treatment of this genus of 45 species has been traced.
76) Nymphaea

N. lutea (1) Britton and Brown (1913)
N. alba (2) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)

N. lutea: Nuphar (as N. lutea [luteum] (L.) Sibth. and Sm.): refs. 1, 6, 8, 9, 11–14, 17–18.
N. alba: Nymphaea: refs. 1, 3, 6, 8, 10–12.

Comments: Salisbury (1805) segregated the white waterlilies (including N. alba) as Castalia, retaining Nymphaea for the yellow (including N. lutea), whereas Smith in Sibthorp and Smith (1809) referred yellow waterlilies to Nuphar, retaining Nymphaea for the white. Conard (1916) and Sprague (1926) argued that Linnaeus’s generic description was primarily based on the white waterlilies. Conservation was, nevertheless, considered necessary and Nymphaea is conserved with N. alba L. as type and Nuphar Sm. is conserved over the homotypic Nymphozanthus with Nuphar lutea (L.) Sm., based on Nymphaea lutea L., as type (Rickett and Stafleu, 1959b; Voss et al., 1983).

Effect of Prop. 297 (Amer. Code priority): None, due to conservation of Nymphaea.
Effect of Prop. 291 (1935 start): None, except that the conservation would be unnecessary.

77) Ophrys

O. ovata (5) Britton and Brown (1913)
O. insectifera (15) Hitchcock and Green (1929, 1935), Farr et al. (1979)

O. ovata: Listera (as L. ovata (L.) R. Br.): refs. 6–12.
O. insectifera: Ophrys: refs. 8, 12.

Comments: Listera is conserved with L. ovata (L.) R. Br. (based on Ophrys ovata L.) as type (Rickett and Stafleu, 1959b).

Effect of Prop. 297 (Amer. Code priority): Ophrys would become a homotypic synonym of the conserved name Listera, and a new name would be required for the 30 species currently referred to Ophrys.

Effect of Prop. 291 (1935 start): None.

78) Ornithogalum

O. arabicum (8) Britton and Brown (1913), Farr et al. (1979)
O. umbellatum (9) Hitchcock and Green (1929, 1935), Phillips (1951)

O. arabicum: Ornithogalum Subgen. Caruelia: ref. 12; Ornithogalum Sect. Caruelia: ref. 2; Ornithogalum: ref. 1.
O. umbellatum: Ornithogalum Subgen. Ornithogalum: ref. 12; Ornithogalum Sect. Heliocharmos: ref. 2; Ornithogalum: refs. 1, 3–4, 6–8, 10–11, 13, 18.

Effect of Prop. 291 (1935 start): None.

79) Pancratium

P. maritimum (4) Britton (1918), Farr et al. (1979)
P. zeylanicum (1) Hitchcock and Green (1929, 1935), Phillips (1951)

P. zeylanicum: Pancratium: refs. 1–2.

Effect of Prop. 297 (Amer. Code priority): Probably none, as no infrageneric treatment of this genus of 15 species has been traced.
Effect of Prop. 291 (1935 start): As above.

80) Passiflora

P. incarnata (21) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926), Killip (1938), Farr et al. (1979), Satherthwait (1982)
P. rubra (9) Hitchcock and Green (1929, 1935)


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Effect of Prop. 297 (Amer. Code priority): Apparently none, as recent treatments regard the alternative generitypes as congeneric and no use of autonyms in infrageneric treatments has been traced.

Effect of Prop. 291 (1935 start): As above.

81) Pedicularis

P. sylvatica (2) Britton and Brown (1913), Pennell (1930), Hitchcock and Green (1935), Li (1948), Farr et al. (1979)
P. palustris (1) Hitchcock and Green (1929)
P. sylvatica: Pedicularis Sect. Bidentata [Ser.] Palustres: Wettstein (1895); Pedicularis Sect. Rhynchoscalpha Series Sylvaticae: ref. 7; Pedicularis Sect. Pedicularis: ref. 12; Pedicularis: refs. 3, 6, 10–11.

Comments: If the 1 Jan. 1935 date is retained in Prop. 297, the first priorable lectotypification will be P. sylvatica, the same as that adopted by Britton and Brown (1913), as this is one of the two cases in which the Hitchcock and Green (1935) list differs from that of Hitchcock and Green (1929).


Effect of Prop. 291 (1935 start): As above.

82) Phaca

P. baetica (1) Britton and Brown (1913), Farr et al. (1979)
P. alpina (2) Rydberg (1929b), Hitchcock and Green (1929, 1935), Barneby (1964)

Comments: Most recent workers (cf. Barneby, 1964; Airy Shaw, 1973) place Phaca in the genus Astragalus. According to Barneby (1964), P. alpina L. is synonymous with A. frigidus (L.) A. Gray, but some elements included under P. alpina are referred by others (e.g. Chater, 1968) to the heterotypic A. alpina L. P. baetica L. (non A. baetica L.) is referred to A. lusitanicus Lam., by Barneby (1964), but to A. glycyphyllus L. by Chater (1968). Barneby (1964) suggests that P. alpina is a more appropriate choice as type of Phaca in that it is the only one “which Linnaeus could have seen in the living state, the only one represented in his herbarium by a specimen, and the only one therefore which could justify the asterisk in the protologue”.

Effect of Prop. 297 (Amer. Code priority): Apparently a change in the usage of Phaca and Erophaca at sectional rank within Astragalus.

Effect of Prop. 291 (1935 start): None.

83) Phalaris

P. arundinacea (3) Britton and Brown (1913), Anderson (1961)
P. canariensis (1) Britton (1918), Hitchcock (1920, 1923), Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)
P. arundinacea: Digraphis (as D. arundinacea (L.) Trin.): ref. 7; Phalaroides (as P. arundinacea (L.) Rauschert): ref. 8; Tsvelev (1976); Phalaris Sect. Digraphis: ref. 3; Phalaris: ref. 1, 4–6, 10–13, 18, Anderson (1961).

Comments: As noted by Rauschert (1969), Phalaroides Wolf predates Digraphis Moench.

Effect of Prop. 297 (Amer. Code priority): For those who segregate P. arundinacea as Phalaroides,
a new name would be required for that monotypic genus and for the genus of about 20 species to which Phalaris sensu stricto is currently applied. For the rest a change in the infrageneric nomenclature of Phalaris would be involved.

**Effect of Prop. 291 (1935 start):** None.

84) Picris

<table>
<thead>
<tr>
<th>Name</th>
<th>Authors</th>
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<tbody>
<tr>
<td><em>P. asplenioides</em> (4)</td>
<td>Britton and Brown (1913)</td>
</tr>
<tr>
<td><em>P. hieracioides</em> (2)</td>
<td>Hitchcock and Green (1929, 1935), Phillips (1951), Lack (1975), Farr et al. (1979)</td>
</tr>
</tbody>
</table>

**P. asplenioides:** Picris Subgen. *Viraea:* Battandier (1889–1890); [Picris Sect. *Helminthia:* Hoffmann (1894)]; Picris (as *P. radicata* (Forssk.) Less.): Tackholm (1956); Picris: Alavi (1983).

**P. hieracioides:** Picris Sect. *Eupicris:* Hoffmann (1894); Picris Sect. *Picris* Series *Hieracioides:* refs. 7; Picris Sect. Picris: ref. 12; Picris: refs. 1, 3–4, 6, 8, 10–11, 18.

*Comments:* Lack (1975) establishes the identity of *P. asplenioides* and notes that as Linnaeus never saw material of this species he could not have based his generic description on it. Lack considers that, for this reason, the earlier Britton and Brown (1913) lectotypification must be rejected in favour of that of Hitchcock and Green.

**Effect of Prop. 297 (Amer. Code priority):** None, if Lack's (1975) rejection of Britton and Brown's (1913) lectotypification can be justified as a supersession under Art. 8; otherwise a change in usage at the infrageneric level.

**Effect of Prop. 291 (1935 start):** None.

85) Psoralea

<table>
<thead>
<tr>
<th>Name</th>
<th>Authors</th>
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<tbody>
<tr>
<td><em>P. bituminosa</em> (4)</td>
<td>Britton and Brown (1913)</td>
</tr>
<tr>
<td><em>P. pinnata</em> (1)</td>
<td>Hitchcock and Green (1929, 1935), Phillips (1951)</td>
</tr>
</tbody>
</table>

**P. bituminosa:** Aspalthium (as *A. bituminosum* (L.) Fourr.): Meikle (1977); Bituminaria (as *B. bituminosa* (L.) (C. H. Stirton): Stirton (1981); Psoralea [Ser.] Spicata-capitatae: Taubert (1894); Psoralea: refs. 1, 7, 11–12.

**P. pinnata:** Psoralea [Ser.] Sparsiflorae: Taubert (1894); Psoralea: ref. 1.

*Effect of Prop. 297 (Amer. Code priority):* If Bitumaria (=Aspalthium) is segregated, Psoralea would have to apply to this group of species, and a new name would be needed for *Psoralea* sensu stricto.

**Effect of Prop. 291 (1935 start):** None.

86) Ranunculus

<table>
<thead>
<tr>
<th>Name</th>
<th>Authors</th>
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<tbody>
<tr>
<td><em>R. auricomus</em> (13)</td>
<td>Britton and Brown (1913), Farr et al. (1979)</td>
</tr>
<tr>
<td><em>R. acris</em> (28)</td>
<td>Hitchcock and Green (1929, 1935), Phillips (1951)</td>
</tr>
</tbody>
</table>

**R. auricomus:** Ranunculus Subgen. *Auricomus* Sect. *Eauricomus* Cycle *Auricomum:* ref. 7; Ranunculus Subgen. *Auricomus:* ref. 12; Ranunculus: refs. 6, 8–11, 14, 18.

**R. acris:** Ranunculus Subgen. *Ranunculus* Sect. *Ranunculus:* ref. 12; *Ranunculus* Subgen. *Chrysanthemum* Cycle *Acri:* ref. 7; *Ranunculus* Sect. *Euranunculus:* ref. 3; *Ranunculus:* refs. 1, 4–6, 8–11, 14.

*Effect of Prop. 297 (Amer. Code priority):* Change in infrageneric usage.

*Effect of Prop. 291 (1935 start):* None.

87) Rosa

<table>
<thead>
<tr>
<th>Name</th>
<th>Authors</th>
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<tbody>
<tr>
<td><em>R. centifolia</em> (6)</td>
<td>Britton and Brown (1913), Hitchcock and Green (1929, 1935), Farr et al. (1979)</td>
</tr>
<tr>
<td><em>R. cinnamomea</em> (1)</td>
<td>Rydberg (1918), Britton and Wilson (1923–1926)</td>
</tr>
</tbody>
</table>

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R. canina (4) Rehder (1949)
R. canina: Rosa Sect. Caninae: refs. 3, 7, 12; Rosa: refs. 1, 4-5, 8, 10-11, 14, 18.

Comments: Heath (1985) and Yeo (1986) have proposed that a generic name may not be lectotypified by the type of the name of a nothospecies and have cited R. [x] centifolia as an example of such a nothospecies, even although its original and most current usage lacks any attribution of it as such (e.g. no multiplication sign). Cf. Greuter and McNeill (1987: 199–200).

Effect of Prop. 297 (Amer. Code priority): None, as the earliest American Code designation, that of Britton and Brown (1913), does not differ from the first non-American Code lectotypification, and the first from 1935 onwards.

Effect of Prop. 291 (1935 start): As above.

88) Rubus
R. fruticosus (5) Britton and Brown (1913), Britton and Wilson (1923–1926), Rehder (1949), Farr et al. (1979)
R. idaeus (1) Rydberg (1913)
R. caesius (4) Hitchcock and Green (1929, 1935), Phillips (1951)
R. fruticosus: [Rubus Sect. Eubatus: Focke (1894)]; Rubus (as R. procerus Muell.): ref. 10; Rubus (as R. discolor Weihe and Nees): ref. 5; Rubus: refs. 8, 14.
R. idaeus: Rubus Subgen. Idaeobatus Sect. Idaeanthi: refs. 3, 7; Rubus Subgen. Idaebatus: refs. 12, 18, Focke (1894); Rubus: refs. 1, 4–6, 8–11, 14.

Comments: Rydberg’s designation of R. idaeus was not published until December 23, 1913, whereas that of R. fruticosus by Britton and Brown appeared on June 7, 1913. According to Heslop-Harrison (1968), R. fruticosus L. is based on a mixture of R. plicatus (Sect. Rubus Subsect. Suberecti) and R. ulmifolius (Sect. Rubus Subsect. Discolorae).

Effect of Prop. 297 (Amer. Code priority): None, except that application of an autonym at subsectional level is difficult in view of the problems of typifying R. fruticosus. Current treatments place both this species and R. caesius in Sect. Rubus.

Effect of Prop. 291 (1935 start): As above, except that the autonym Subsect. Rubus could be applied more unequivocally.

89) Rudbeckia
R. hirta (3) Britton and Brown (1913), Farr et al. (1979)
R. laciniata (1) Hitchcock and Green (1929, 1935)
R. hirta: Rudbeckia Sect. Eurudbeckia: ref. 3; Rudbeckia: refs. 1, 4–8, 10–12, 17–18.
R. laciniata: Rudbeckia Sect. Eurudbeckia: ref. 3, Hoffmann (1894); Rudbeckia: refs. 1, 4–8, 10–12, 18.

Effect of Prop. 297 (Amer. Code priority): None, apparently, as no infrageneric treatment separating the two species has been traced.

Effect of Prop. 291 (1935 start): As above.

90) Salix
S. pentandra (3) Hitchcock and Green (1929, 1935), Rehder (1949), Phillips (1951)
S. pentandra: Salix Subgen. Amerina Sect. Pentandrae: ref. 7; Salix Sect. Pentandrae: ref. 3, Schneider (1904), Chou Yi-liang et al. (1984); Salix Subgen. Salix Sect. Pentandrae: Skvortsov (1968a, 1968b);
Salix Subgen. Salix Sect. Salicaster: Dorn (1976), Argus (1986); Salix Subgen. Salix: ref. 12; Salix Sect. Salix: Chou Yi-liang et al. (1984); Salix: refs. 1, 4, 6, 8–11.

Effect of Prop. 291 (1935 start): Change in the most recent usage (Dorn, 1976; Argus, 1986) at the sectional level.

91) Salsola
- S. kali (1) Hitchcock and Green (1929, 1935), Phillips (1951)


Effect of Prop. 297 (Amer. Code priority): Probably none, as recent treatments include the two species in the same section.
Effect of Prop. 291 (1935 start): As above.

Sanguisorba:
- Phillips (1951) cites S. canadensis L. as the type, but all other authors including Rydberg (1908), Britton and Brown (1913), Hitchcock and Green (1929, 1935), Nordborg (1966) and Farr et al. (1979) accept S. officinalis L.

92) Scabiosa
- S. arvensis (8) Britton and Brown (1913), Britton (1918), Farr et al. (1979)
- S. columbaria (10) Hitchcock and Green (1929, 1935), Phillips (1951)

S. arvensis: Knautia (as K. arvensis (L.) Coulter): refs. 1, 3–6, 8–12, 14.
S. columbaria: Scabiosa Sect. Sclerostemma Series Columbariae: ref. 7; Scabiosa Sect. Sclerostemma: ref. 12, Scabiosa: refs. 4, 6–8, 11.

Comments: The Flora europaea treatment (ref. 12) does not use the autonym.
Effect of Prop. 297 (Amer. Code priority): The 50 species currently referred to Knautia would have to be called Scabiosa and a new name found for the 100 species currently included in Scabiosa.
Effect of Prop. 291 (1935 start): None.

93) Scirpus
- S. lacustris (8) Britton and Brown (1913), Britton (1918), Britton and Millsbaugh (1920), Hitchcock (1923)


Comments: Schoenoplectus Palla is conserved (over the earlier Heleophylax Beauv. and Elytrospermum C. A. Mey.) with S. lacustris (L.) Palla (=Scirpus lacustris L.) as type.
Effect of Prop. 297 (Amer. Code priority): Scirpus and Schoenoplectus would become homotypic, so for those who segregate Schoenoplectus, a new name would have to be found for the 300 species currently included in Scirpus sensu stricto; for the rest Schoenoplectus would replace Scirpus as the correct name for the genus in the broad sense.
Effect of Prop. 291 (1935 start): None.

94) Scutellaria
- S. peregrina (8) Britton and Brown (1913), Britton and Wilson (1923–1926), Farr et al. (1979)
- S. galericulata (4) Hitchcock and Green (1929, 1935)

S. peregrina: Scutellaria Sect. Euscutellaria [Ser.] Vulgares B. Peregineae: Briquet (1897); Scutellaria
Sect. Vulgares Subsect. Peregrinae: Bothmer (1969); Scutellaria: refs. 6, 12 (as S. rubicunda Hornem.).


Comments: Greuter and Rechinger (1967) and Richardson (1972) treat S. peregrina L. as a nomen ambiguum.

Effect of Prop. 297 (Amer. Code priority): Probably none, apart from the problems of typifying S. peregrina, as the two species are relatively closely related and no infrageneric treatment using autonyms has been traced.

Effect of Prop. 291 (1935 start): As above.

95) Sedum
S. telephium (2) Britton and Rose (1905), Britton and Brown (1913), Farr et al. (1979)
S. acre (12) Hitchcock and Green (1929, 1935), Rehder (1949)
S. telephium: Hylotelephium (as H. telephium (L.) Ohba): Ohba (1977); Sedum Sect. Telephium Subsect. Erecticaulia Series Eu-Telephiae: ref. 7; Sedum Sect. Telephium Series Erecticaulia Subser. EuTelephium: ref. 2; Sedum Group Telephium: ref. 1; Sedum: refs. 3–6, 8, 10–12.
S. acre: Sedum Sect. Eusedum Subsect. Crassifoliae Series Acre: ref. 7; Sedum Sect. Sedagenuina Series Acria: ref. 2; Sedum Group Eusedum: ref. 1; Sedum: refs. 3–6, 8–12, 18.

Comments: On the basis of morphological and chromosomal evidence, Ohba (1977) segregates the S. telephium group of species as a separate genus, Hylotelephium, with H. telephium as type.

Effect of Prop. 297 (Amer. Code priority): For those who accept Hylotelephium the adoption of Sedum for this group of about 30 species, and a new name for the nearly 600 species that are currently referred to Sedum sensu stricto; for others there would be a change in the traditional usage of the typical infrageneric group.

Effect of Prop. 291 (1935 start): None.

96) Serapias
S. helleborine (1) Britton and Brown (1913)
S. lingua (2) Hitchcock and Green (1929, 1935), Farr et al. (1979)
S. helleborine: Epipactis Sect. Arthrochilium Series Veratrifoliae (as E. palustris (L.) Crantz): ref. 7; Epipactis (as E. helleborine (L.) Crantz): refs. 1, 3–6, 8, 10–12.
S. lingua: Serapias: ref. 12.

Comments: Serapias is conserved with S. lingua as type (Voss et al., 1983).


Effect of Prop. 291 (1935 start): None, except that conservation would be unnecessary.

97) Sesamum
S. orientale (1) Britton and Wilson (1923–1926)
S. indicum (2) Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979)
S. orientale: Sesamum (as S. indicum L.): refs. 1, 3, 6, 11; Sesamum: ref. 7.

Comments: Sesamum indicum and S. orientale are both generally considered to apply to the cultivated sesame, the latter being treated as a synonym of the former (cf. e.g. Pursglove, 1968).

Effect of Prop. 297 (Amer. Code priority): None because the species are considered conspecific.

Effect of Prop. 291 (1935 start): As above.

98) Sida
S. alnifolia (3) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926)
S. rhombifolia (2) Hitchcock and Green (1929, 1935), Phillips (1951), Hu (1955), van Borssum Waalkes (1966), Abedin (1979), Farr et al. (1979)

Effect of Prop. 297 (Amer. Code priority): Probably none in view of the assignment of the species to the same section by Schumann (1895).
Effect of Prop. 291 (1935 start): As above.

99) Sideritis
S. hirsuta (8) Britton and Brown (1913), Britton (1918), Farr et al. (1979)
S. hyssopifolia (7) Hitchcock and Green (1929, 1935)
S. hyssopifolia: Sideritis Sect. Eusideritis: Briquet (1897); Sideritis Sect. Sideritis: ref. 12; Sideritis: refs. 1, 12.

Effect of Prop. 297 (Amer. Code priority): None, as both species have always been placed in the typical section.
Effect of Prop. 291 (1935 start): As above.

100) Silene
S. anglica (1) Britton and Brown (1913), Britton (1918), Farr et al. (1979)
S. gallica (5) Hitchcock and Green (1929, 1935), Rehder (1949), Phillips (1951)
S. anglica: Silene Sect. Cinconsilene Series Scorpioideae: ref. 7; Silene (as S. gallica L.): refs. 5–6, 10–12, 18.

Comments: Silene anglica is almost universally treated as conspecific with S. gallica.
Effect of Prop. 291 (1935 start): None.

101) Sisymbrium
S. nasturtium-aquaticum (1) Britton (1913), Payson (1922), Hitchcock and Green (1929, 1935), Phillips (1951), Farr et al. (1979), Hewson (1982)
S. nasturtium-aquaticum: Rorippa (as R. nasturtium-aquaticum (L.) Schinz and Thell.): refs. 5, 16, Liogier (1965); (as R. nasturtium-aquaticum (L.) Hayek): Hewson (1982); Nasturtium (as N. officinale R. Br.): refs. 1–4, 6–8, 10–12, 15, 17–18, Liogier (1967).
S. altissimum: Sisymbrium Sect. Pachypodium: refs. 2, 7; Sisymbrium Sect. Eusisymbrium: ref. 3; Sisymbrium Sect. Sisymbrium: ref. 12; Sisymbrium: refs. 3–6, 8, 10–11, 18, Hewson (1982).

Comments: N. officinale R. Br. is the type of the conserved name Nasturtium, and is homotypic with S. nasturtium-aquaticum L.
Effect of Prop. 297 (Amer. Code priority): For those who distinguish the conserved Nasturtium R. Br. (1812) from Rorippa Scop. (1760), Sisymbrium would become a synonym of Nasturtium; for those who combine the genera, Rorippa would have to take precedence over the earlier Sisymbrium under Art. 14.7, in that Sisymbrium is implicitly rejected against Nasturtium R. Br., whose type is included in Rorippa. In either case a new name would be required for the 90 or so species currently called Sisymbrium. This would, in fact, be Erysimum (see above), unless that name were conserved to maintain its current application. As Schulz (1936) includes both Rorippa and Nasturtium in the tribe Arabideae, a new name would be required for Brassicaceae tribe Sisymbrieae, as currently understood.
Effect of Prop. 291 (1935 start): None.

102) Sophora
S. alopecuroides (1) Britton and Brown (1913), Britton (1918), Britton and Wilson (1923–1926), Farr et al. (1979)

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S. tomentosa (2) Hitchcock and Green (1929, 1935), Rehder (1949), Phillips (1951)
S. alopecuroides: Sophora Sect. Goebelia: ref. 7; Sophora: ref. 12.
S. tomentosa: Sophora: refs. 1, 6, 11, 15-17, Fawcett and Rendle (1920), Urban (1920–1921), Leon and Alain (1951).

Effect of Prop. 297 (Amer. Code priority): Apparently none, as recent treatments regard the alternative generic types as congeneric and no use of autonyms in infrageneric treatments has been traced.
Effect of Prop. 291 (1935 start): As above.

103) Stachys
S. germanica (4) Britton and Brown (1913), Britton (1918), Farr et al. (1979)
S. sylvatica (1) Hitchcock and Green (1929, 1935), Phillips (1951)
S. germanica: Stachys Sect. Eriostomum [Ser.] Germanicae: Briquet (1897); Stachys Sect. Eriostomum: ref. 12; Stachys: refs. 1, 3-4, 6-8, 10-11.
S. sylvatica: Stachys Sect. Eustachys [Ser.] Genuinae: Briquet (1897); Stachys Sect. Stachys: ref. 12; Stachys: refs. 3-4, 6-7, 11.

Effect of Prop. 297 (Amer. Code priority): Change in usage at the sectional level.
Effect of Prop. 291 (1935 start): None.

104) Tagetes
T. patula (1) Britton and Wilson (1923–1926), Farr et al. (1979)
T. erecta (2) Hitchcock and Green (1929, 1935), Phillips (1951)
T. patula: Tagetes: refs. 1, 4, 6-7, 10, 15, 18.

Effect of Prop. 297 (Amer. Code priority): Apparently none as no infrageneric treatment of this genus of about 50 species has been traced.
Effect of Prop. 291 (1935 start): As above.

105) Thalictrum
T. foetidum (2) Britton and Brown (1913), Boivin (1944), Farr et al. (1979)
T. aquilegifolium (12) Hitchcock and Green (1929, 1935), Phillips (1951)
T. aquilegifolium: Thalictrum Sect. Tripterium: ref. 7; Thalictrum Subgen. Thalictrum Sect. Tripterium: Boivin (1944); Thalictrum: refs. 1, 8, 12.

Comments: Boivin (1944) took the view that because T. aquilegifolium had previously been segregated from Thalictrum the earlier choice of T. foetidum as type was to be preferred.
Effect of Prop. 291 (1935 start): Change in infrageneric usage.

106) Tournefortia
T. hirsutissima (2) Britton and Millspaugh (1920), Britton and Wilson (1923–1926), Johnston (1930, 1951), Farr et al. (1979)
T. volubilis (3) Hitchcock and Green (1929, 1935), Phillips (1951)

Comments: The separation of T. hirsutissima and T. volubilis into separate sections is supported by differences in pollen morphology (Nowicke and Skvarla, 1974).
Effect of Prop. 291 (1935 start): Change in the infrageneric nomenclature used by Johnston (1930) and Nowicke and Skvarla (1974).
107) **Tremella**

*T. juniperina* (1) Arthur (1901)
*T. nostoc* (2) Donk (1958)

*T. juniperina*: Gymnosporangium (as *G. juniperina* (L.) Mart.): Donk (1958).
*T. nostoc*: Nostoc (as *N. commune* Vaucher ex Bornet and Flah.): Donk (1958).

**Comments**: As Linnaeus took the name from Dillenius and included two of his species, Donk (1958) considered that one of these should be the type rather than the earlier section by one of the authors of the American Code. With Donk's (1958) selection, *Tremella* L. becomes an invalid name as it would be a pre-starting point name for a member of the Nostocaceae Heterocystaeae (1 Jan. 1886). If, on the other hand, Arthur's (1901) lectotypification were to be priorable, the name would refer to a genus of the Uredinales which now have a starting-point date of 1753. *Tremella* Pers. (type *T. mesenterica*) is, however, conserved, making *Tremella* L. a rejected name, regardless of its typification.

**Effect of Prop. 297 (Amer. Code priority)**: None, in view of the conservation of *Tremella* Pers.

**Effect of Prop. 291 (1935 start)**: None, as *Tremella* L. would then be invalid.

108) **Trichomanes**


**Comments**: Pichi Sermolli (1981) reviewed thoroughly the typification of *Trichomanes* and concluded “that the type of this genus can be no other species than *T. crispum*”. He also noted that “such a typification represents the best manner of contributing to the stability of nomenclature”. His conclusions are based on his demonstration that there are “clear indications of the intent of Linnaeus to regard *T. crispum* as the chief species, while . . . [there is] no indication in favour of *T. scandens* . . .”. He does not, however, argue for the supersession of Smith’s (1875) choice in terms of the “serious conflict with the protologue” requirement of Art. 8.

**Effect of Prop. 297 (Amer. Code priority)**: None because of Smith’s earlier lectotypification.

**Effect of Prop. 291 (1935 start)**: Change in Morton’s infrageneric usage, but maintenance of the generic treatments of Copeland (1947) and Pichi Sermolli (1956).

109) **Typha**

*T. latifolia* (1) Wilson (1909), Britton and Brown (1913), Britton (1918), Britton and Millspaugh (1920), Britton and Wilson (1923–1926)
*T. angustifolia* (2) Hitchcock and Green (1929, 1935)

*T. latifolia*: Typha Sect. Ebracteolatae: ref. 7; Typha: refs. 3–8, 10–13, 17–18.
*T. angustifolia*: Typha Sect. Bracteolatae: ref. 7; Typha: refs. 3–8, 10–13, 17–18.

**Effect of Prop. 297 (Amer. Code priority)**: Apparently none, as recent treatments regard the alternative generic types as congeneric and no use of autonyms in infrageneric treatments has been traced.

**Effect of Prop. 291 (1935 start)**: As above.

110) **Valeriana**

*V. pyrenaica* (12) Britton and Brown (1913), Britton and Wilson (1923–1926), Farr et al. (1979)
*V. officinalis* (5) Hitchcock (1923), Hitchcock and Green (1929, 1935), Phillips (1951)

*V. officinalis*: Valeriana Subgen. Valeriana Sect. Rhizophorae Series Officinales: ref. 7; Valeriana: refs. 1, 3–6, 8, 10–12.

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Effect of Prop. 297 (Amer. Code priority): None, apparently, as no infrageneric treatment using autonyms has been traced.

Effect of Prop. 291 (1935 start): As above.

111) Verbesina

V. alba (7) Britton and Brown (1913), Britton and Wilson (1923–1926), Phillips (1951), Farr et al. (1979)

V. alata (1) Hitchcock and Green (1929, 1935), Phillips (1951)

V. alba: Eclipta (as E. prostrata (L.) L.): refs. 12, 16, Liogier (1967); Eclipta (as E. alba (L.) Hassk.): refs. 7, 10, 15, 17–18, Hoffmann (1894); Verbesina: ref. 11.

V. alata: Verbesina Sect. Hamulium: Hoffmann (1894); Verbesina: refs. 6, 11, 15.

Comments: Eclipta L. is conserved over Eupatoriophalacron Miller with E. erecta L. (nom. illeg.), homotypic with V. alba, as type.

Effect of Prop. 297 (Amer. Code priority): Verbesina would become a synonym of the conserved Eclipta and a new name would be required for the 150 species currently referred to Verbesina.

Effect of Prop. 291 (1935 start): None.

112) Viburnum

V. tinus (1) Britton and Brown (1913)

V. lantana (5) Hitchcock and Green (1929, 1935), Rehder (1949), Farr et al. (1979)

V. tinus: Viburnum Subgen. Tinus: Fritsch (1897); Viburnum Sect. Tinus: ref. 7, Rehder (1940), Donoghue (1985); Viburnum: refs. 1, 8, 12.

V. lantana: Viburnum Subgen. Euviburnum Sect. Lantana: Fritsch (1897); Viburnum Sect. Lantana: Donoghue (1985); Viburnum: refs. 1, 4, 6, 8, 12, 14.

Effect of Prop. 297 (Amer. Code priority): Change in nomenclature at the sectional level.

Effect of Prop. 291 (1935 start): None.

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