Progress necessitates change, and the sooner a necessary change is made, the less disturbance is created. To regard the Code as final must involve its death.

(Willmott in Journ. of Bot. 1922 p. 201).

# **PROPOSITIONS**

ON THE INTERNATIONAL RULES OF BOTANICAL NOMENCLATURE IN REGARD TO THE INTERNATIONAL BOTANICAL CONGRESS IN LONDON 1930

Dr. J. VALCKENIER SURINGAR Ret. Prof. of the Agriculture Academy at Wageningen.

P. I. = Personal Ideas about the application of the International Rules of Nomenclature, or, as with the Rules themselves, International deliberation?

Some denominations of I. Coniferous, II. Dicotyledonous Trees- and Shrubs-species, with a retrospection and a set of Propositions on the Nomenclature-Rules.

in English: Mededeelingen van 's Rijks Herbarium No. 55, 56. 1928.

in German: Mitteilungen der Deutschen Dendrologischen Ge-

sellschaft 1927, 1929. Mededeelingen van de Landbouwhoogeschool te Wageningen, Dl 30 Verh. 2, 1926; Dl 32 Verh. 5, 1928. in Dutch:

A number of separates is available.

#### CHAPTER I.

ART. 5, al. 1, to read, instead of "for exceptions.... copying": to bring it before an International Congress; until it is accepted it remains illegal.

al. 2, to read, instead of "established custom becomes law": the question must be brought before an International Congress. Motive: "Law" (loi in the French text) is a wrong expression in a set of "Rules" (Règles); moreover the statements "serious in convenience" and "established custom" are doubtful and give rise to disagreement, arbitrariness and hence to confusion.

ART. 7, second sentence, to read, instead of "by custom": by an International Congress.

The third sentence is a recommendation, that as such ought to be set apart.

> Laboratorium voor Plantensystematiek en -Geografie der Landbouwhoogeschool Uit de nalatenschap Dr J. Valckenier Suringar

New article 9a: A new rule or recommendation, accepted in principle by an International Congress will, unless it is declared by the Congress to be fully realised (ganz ubersichtlich), not at once come into force; but a commission will at first study the rule or recommendation in all its consequences and give a report to the following Congress, which takes the decision; if it is then again accepted, eventually emendated, it comes into force.

Motive: the experience with the rules of 1867 and 1905.

#### CHAPTER III.

ART. 15, addition: The priority of a combination of a genus and a species name prevails over that of the species name separated. For example: Cytisus albus Hacq. 1790 non Lk 1822 though Genista alba Lam. 1786 = C. albus Lk; Rhododendrum japonicum V.Sur. 1908 non Schn. 1912, though Hymenanthes japonica Bl. 1826 = Rh. japonicum Schn.

Motive: cf. P. I. II, no. 14, 25; if Rh. japonicum Schn. is taken as the legal name, then Rhododendrum molle Aut. non G. Don must obtain a new name (f.i. Rh. japoniense), but as an Azalea it would retain the name Azalea japonica A. Gr.

ART. 20, to insert after "genera": and species 1). To omit: "These.... 1890."

Motive: It would be well to enlarge the list with more names for other and different reasons, f. i. to do away with insipid names (cf. P. I. II, no. 19a), and to end a number of differences of opinion with respect to the legal names (nomenclaturally, not taxonomically). In this way the International Rules could be applied most strictly, without personal prepossession, because undesired names could always be put aside by that list; f. i. Pinus inops Bong. (P. contorta), cf. P. I. I, no. 6.

To intercalate after "retained in all cases": ; the "nomina rejicienda" are only meant to be rejected with respect to the nomina conservanda concerned.

New alinea: Mcreover there is to be made and kept up to date a list of nomina dubia, which, so long as their dubiousness continues, are thereby excluded as synonyms from other species and of course may not be used as legal names of well-established spe-

<sup>1)</sup> Cf. appendix.

cies. F. i. Abies Jezoensis S. & Z., Abies heterophylla RAF., Pinus taxifolia LAMB., Clematis trifoliata Thunb., Toxicodendron altissimum Mill., Celastrus striatus Thunb., Vitis Kaempferi Koch, Desmodium formosum Vogel, Prunus paniculata Thunb., Corchorus scandens Thunb., Crataegus Lavallei Lav., Amelanchier racemosa Lindl., Azalea lutea L., Viburnum macrophyllum Thunb. Cf. P. I. I, II (p. 65: Summary).

New article after Art. 24: two genera cannot bear the same generic name. Generic names, lapsed into synonymy but being conditional synonyms, are to be taken into account as not-to-be-used. Cf. foot note 2 on p. 17.

A list of "nomina homonyma conservanda" is to be compiled. Motive: A conditional synonym is a synonym, which is a valid 1) name but as a synonym depends on a special idea of relationship etc. The opinion with respect to that relationship may at any time change again, even as a personal idea of one botanist, so that the synonym becomes a legal name; and then the "later homonym" should require another name.

But to prevent some changes of much used names, when the new article is applied retro-actively, a list of nomina homonyma conservanda (to be retained in all cases) may be compiled.

An example of an "earlier homonym" being an unconditional synonym is Torreya RAF. 1818 (identified with Synandra NUTT. 1818); therefore the name Torreya RAF. is not to be taken into account, and Torreya ARN. is a legal name (with the American code the "later homonym" Torreya ARN. 1838 is declared illegal as well and is replaced by Tumion RAF.; see f. i. Checklist of the forest trees of the U. St. 1927, p. 44).

Recomm. IV b, to omit: "except.... Kerner)."

Motive: there is no reason for making a difference between names ending in er or otherwise, and it causes confusion in the pronounciation (Leycéstera or Leycestéra, but Leycestéria without doubt or difference of opinion). Like Leycestéria we have Gaultheria, Koelreuteria, etc.

New Recommendation to be added to Rec. IV: The names are to be spelled according to the original names, from which the

<sup>1)</sup> Cf. Art. 56, 2nd al.

plant names are derived, and according to the rules of Latin and Latinization. F. i. Gleditschia, Wistaria, Xanthoxylum, Pentastemon; Cypressus, Thyja, Pirus, Evonymus but Euberberis (see Art. 57, al. 2).

Greek names ending in on and oon are to be latinized into names ending in um and on. F.i. Xanthoxylum, Pentastemon, Rhododendrum, Erigeron.

Motive: cf. P. I. II, no. 19b; at present there is chaos in the spelling of names (Zanthoxylum and Xylosteum, Zanthoxylum and Liriodendron, Menziesia and Weigela in the same book; and a name ending in on may be masculine or neuter. With the cited suggestion there will be method and hence fixity, unity, plainness; moreover all names ending in on are in this way masculine.

Names of Greek origin, which commence by a vocal provided with a spiritus asper, are to be written and pronounced with an h, f.i. Heleocharis, Halimodendrum, Helodea, Hedera, Helianthemum.

Motive: there is no reason to neglect the spiritus asper; and if written without h, the pronounciation will often be also without h. Moreover there is nowadays chaos on this point, which is especially troublesome in Indices, Catalogues and suchlike papers.

Recomm. V, addition: avoid names commencing with pseudo or ending in oides or opsis before resp. behind another generic name.

Motive: they are insipid names, testimonia paupertatis (cf. Botanicoides in LINNAEUS Critica bot., no. 226). Those ending in oides and opsis are moreover no substantives.

Recomm. Vb, addition: and which is a conditional synonym. Motive: see Motive of the new article after Art. 24.

ART. 26, addition: A speciesname, which is composed, conforming to Art. 26 and is published in or after 1753, is valid notwithstanding it might be published in a work, that does not contain, in principle, Linnean trivial (our species) names. F.i. Cedrus libani TREW, Alnus vulgaris HILL.

Motive: The names are valid in themselves; and in so far some of them might be inconvenient, they may be put on a list of nomina specifica rejicienda. Cf. P. I. I, no. 12, II, no. 4.

Further, additions:

- 1. The species names follow the gender of the genus in which they are placed.
- 2. All names ending in us, and belonging to the second Latin declination, are to be taken as masculine.
- 3. A list will be compiled from names of which the gender is doubtful (f.i. Panax).

Motive: we do not believe in tree-nymphs; and as not all trees are be taken as feminine after the classic nymph-rule (f.i. Acer species), there is complication, which becomes greater by the names of shrubs and herbaceous plants ending in us and which are partly masculine, partly feminine; no one can retain them in one's memory and some cases are doubtful: the result is chaos on that point in the botanical literature.

4. In the same manner as the description of a genus must embrace the whole extent of the genus, so the description of a species ought to include all subspecies (varieties in the former sense) and not only represent a so-called "typical" subspecies resp. variety.

After the description of the species in toto, special characters of all the subspecies and varieties are to be mentioned. If a description of the species in toto is not desired, then the species name may be given with only a small diagnosis, and each of the subspecies resp. varieties with an ample description.

For example, a description, following the name *Pinus nigra* ARN. emend., must give the reader the idea of the whole species, not only that of s.sp. resp. var. austriaca (*P. nigra* ARN. in the original sense); by the side of s.sp. austriaca its special characters are to be given; etc. Or, *Pinus nigra* ARN. emend. is to be left with a short diagnosis, and the subspecies to be more or less amply described.

In the case that a species or one or more of its subspecies has (have) the propriety of developing bud-variations and suchlike, then this propriety is to be mentioned in general terms in the description of the species resp. subspecies.

Examples of the second mentioned manner of description are found in the writer's book ...Het geslacht Cyperus s.a." 1898.

New Recommendation to Rec. VIII—XIV: id. as first alinea of New Rec. added to Rec. IV; f.i. silvestris, sinensis, Pissardii.

Motive: as with the New Rec. to IV; now we find f.i. Pinus sylvestris and Genista silvestris, Aesculus chinensis 1) and Gledits(ch)ia sinensis, Prunus Pissartii (from PISSARD) and Viburnum Sieboldii (from SIEBOLD) in the same book.

Addition: A list of all names, which are accepted as being originally taken from generic names, will be compiled.

Motive: it is not so easy, as it seems to be, to know if a species name is taken from a generic name (robur, betulus, caprea, aucuparia, etc.).

Rec. XIb, to omit: "except.... Kerner)."

Motive: cf. id. in Rec. IVb.

Recomm. XIVf, addition: being conditional synonyms.

Motive: see Motive of the new article after Art. 24.

Recomm. XIV, addition: avoid names ending in oides (behind names of Greek origin) or oideus (behind names of Latin origin) or in inus, especially such ones, being another species name of the same genus with that suffix (Panicum capillare L., P. capillarioides VASER).

Motive: cf. new alinea to Art. 31 and 33.

Moreover names being specific names with the ending oides or inus are testimonia paupertatis; and names being generic names with the ending oides or inus give rise to almost-tautological names like Cyperus cyperinus V. Sur., Cyperus cyperoides O. K.

ART. 27, addition: Species names, which have lapsed into synonymy but are conditional synonyms, are to be taken into account as not-to-be-used. A list of "nomina homonyma conservanda" will be compiled. See footnote 2 on p. 17.

Motive: see Motive of the new article after Art. 24.

ART. 28, to omit: "forms.... arrangement"; and in the Examples: "forma.... maculata".

Motive: see the following new articles.

New articles before art. 28:

28a. So named Varieties, which are in reality small-species

<sup>1)</sup> To read in P. I. II, p. 41, line 9 from beneath: Aesculus instead of Acer.

(Smallspecies-varieties, Kleinart-Varietäten) and which differ from a species by an indefinite number of characters, are to be called subspecies. F.i. Cornus alba (tatarica) s.sp. sibirica; Pinus nigra (laricio) s.sp. austriaca.

In Catalogues, Seedlists etc. all subspecies may be treated as species, f.i. Cornus sibirica, Pinus austriaca. This abbreviation is the more desirable in the cases where the subspecies furnishes varieties.

As Varieties (Varietates) are to be taken the plants, which differ from a species (or subspecies) by one or a few, at all events by a definite number of characters (Character-varieties, Merkmal-Varietäten); they often originate from so-called budvariations, and they are more or less constant by seed. Example: Cornus alba s.sp. sibirica var. fol. aur. marg., or, abbreviated for catalogues etc.: C. sibirica var. fol. aur.marg.

In the same way we have var. pendulus, fastigiatus (this term in the place of the insipid pyramidalis), glaucus, albo-plenus, etc.

It would not be practical to sub-divide in catalogues and suchlike the varieties, f.i. var. marginatus subvar. aureo-marginatus etc.; var. purpureus subvar. pendulus etc.

More practical it is to write at once var. aureo-marginatus etc.; var. purpureus (or eo) -pendulus etc.

Variety names may be united to composite names f.i.: var. purpureus, var. laciniatus, var. pendulus; var. purpureus-pendulus, var. purpureus-laciniatus, var. laciniatus-pendulus; var. purpureus-laciniatus-pendulus. Etc.

28b. Each species or variety gives by seed some characters in different grades in the different Individuums, f.i. a blue coloured species or variety will furnish Individuums, which are more or less blue. Often such Individuums are propagated vegetatively for the sake of that special grade of a character.

These specimen-varieties are to be distinguished by the term Forma and obtain a trivial (fancy) name; f.i. Picea pungens var. glauca forma "Koster" (usually called var. Kosteri or Kosteriana). The trivial name is put between" "in order to be able to distinguish it from an author's name; f.i. Picea pungens var. glauca f. "Koster" Masters. 1)

<sup>1)</sup> It is still better to write always Mr., Mrs., or Miss before the name of a person, f.i Mr. Koster, Mr. Young, Mr. Irwin, Miss Eva Rathke, etc. Then the marks of parenthesis are not needed.

It is not necessary to write the f. so long as care is taken that the name of the variety is a good Latin name, that of the form a good trivial word.

When a species itself shows in one of its individuums a character in a special grade, f.i. an extra blue Cedrus atlantica specimen, then that form may be given at once a trivial name behind the species name, without the name of a variety. Example: Betula pendula f. "Young" 1) (Betula alba var. pendula f. Youngii Hort.).

28c. For physiological varieties a special denomination ought to be invented by those interested.

Motive of 28a-c: Varieties of different kinds are nowadays mixed together in different ways by different authors: we have one beside the other f.i. Abies concolor var. lasiocarpa (Small-species-Variety), Picea pungens var. glauca (Character variety), P. pungens var. Kosteri or Kosteriana (Specimen-variety); Acer Negundo var. californicum (Small-species-variety), Acer Negundo var. auratum (Character-variety), Acer platanoides var. Schwedleri (Specimen-variety).

Formas are but specimina, which can only be propagated vegetatively; so they must not have species or even variety names, and must always be connected with the species or variety, to which they belong.

ART. 29, second alinea, to read instead of: "and the subdivisions.... species": but the subdivisions of any one species may not bear the same name as that of other species of the genus to which it belongs.

Motive: A subspecies is often treated as species; cf. moreover my proposition 28a, and the actual recommendation XVI.

ART. 30, to omit: "and half-breeds".

Motive: They belong to § 5.

The remainder of this article is treated in prop. 28b.

ART. 31 and 33, addition at the end of the first alinea: by a Latin name and a fancy name.

ART. 31 and 33, new alinea: A hybrid between two species of a genus is designated by the name of one of its parents with the suffix oides (for Greek words) and oideus (for Latin words) or

<sup>1)</sup> See note page 7.

with the prefix hybrid(o) or hybr(o); f.i. x Viburnum rhytido-phylloides, hybrorhytidophyllum or hybridorhytidophyllum.

The choice between the names of the two 1) parents is left to the author of the name; it is desirable that the name of that parentspecies is chosen, to which the hybrid is most like.

In this way all the hybrids between two 1) species together obtain only two 1) different Latin names.

Moreover each of them gets a fancy name between "", with the title Forma; f.i. x Viburnum rhytidophylloides or hybrorhytidophyllum f. "Holland" (see for this new hybrid the Yearbook of the Dendrol. Soc. of the Netherlands 1927, p. 143, 1928, p. 140), Berberis empetrifolioidea (or hybrempetrifolia) f. "Irwin" 2) (now called B. Irwinii Bijh.) = B. empetrifolia Lam. × Darwinii Hook.

The letter f may be dropped if one likes.

If only one parent of the hybrid(s) is known, the hybrid is called after that one; if none of the parents, then the term hybridus is given or no Latin name but only a fancy name; f.i. Diervillea hybrida f. "Eva Rathke" or Diervillea f. "Eva Rathke".1)

ART. 32, to read: Hybrids between the species of two different genera are called by a genus name, composed of the two names, by a species name made from one of the generic names with the suffix oides resp. oideus or with the prefix hybr(o) or hybrid(o), and with a fancy name between ""; f.i. x Crataegomespilus crataegoides (or hybridocrataegus) f. "Asnière" (usually called C. Asnieresii Schn., x Crataegomespilus mespiloides (or hybridomespilus) f. "Dardar" 1) (usually called x C. Dardari Jouin) = Crataegus monogyna Jacq. x Mespilus germanica L.

Motive: There is chaos in the designation of hybrids in the literature. We find f.i. one beside the other in one book Diervillea florida x coraensis Montblanc (fancy name of as pecimen hybrid) and Stelzneri (species name of a specimen hybrid), in another book Diervillea intermedia (florida x coraensis) var. Isoline, Stelzneri, in a third book: Diervillea hybrida Sorte Mad. Couturier, Groenewegeni.

<sup>1)</sup> Three when there are three parents, four when four, etc.
2) See the footnote on p. 7.

Hybrids between two or more species, so far not constant by seed and in that case no longer hybrids but species, are heterozygotic specimina of varieties, and therefore not all of them must have (no more than all the formas of a variety) names like species names; one or two (internary hybrids three) specieslike names for all of them suffice to indicate their hybrid character and their connection with one of their parentspecies. The fancyname gives the further distinction.

When the denomination with oides (oideus) for hybrids is accepted, care ought to be taken:

Ist that henceforth no speciesnames are made with the suffix oides or oideus, especially no such ones, being another species of the same genus with that suffix; yea, existing names of that kind should rather be modified in all or at least in definite cases, f.i. by giving them a suffix like accus or aster; f.i. Hydrangea opulaster instead of H. opuloides, Acanthopanax sciadophyllaceus instead of A. sciadophylloides. At all events, so far as the names are not modified, the mark x shows the difference between a species and a hybrid name. And with the prefix hybr(id)o there is no such likeness in names of species and hybrids; existing species ending in oides may get that same prefix hybr(id)o.

2nd that the name hybridus is not used henceforth for a species, which is no hybrid; existing names of that kind should rather be re-baptised; but the mark x shows here also the difference.

To eliminate in papers for general use synonymous names of hybrids, caused through this method by personal ideas about the affinities of genera and species (Crataegus and Mespilus, Crataegus incl. Mespilus or Mespilus incl. Crataegus; Cornus sibirica or C. alba var. sibirica; etc.) and about the nomenclature (Ulmus glabra or U. scabra; etc.) the hybrid names must be put under the regime of the list of names, mentioned in the proposed new Chapter IVa.

Recommendation XVII, addition: Half breeds obtain a name in the same way as hybrids; instead of names of parent-species, there are here names of parent-subspecies.

ART. 35, first alinea, addition: excepted catalogues of nurserymen, seedlists and suchlike papers.

Motive: those papers are generally not intended neither compiled nor kept as scientific publications. Cf. also the new Article to Sect. 4.

ART. 36, addition: As **Diagnosis** is meant only the summary of the principal characters of the new group, especially with respect to the existing related groups of the same range.

Motive: there has appeared misunderstanding with respect to what is meant by Diagnosis; it is confused with description. A Latin description may give difficulties, but a diagnosis does not deface any work even if it is written in a modern language, and it is easy to be made or to be understood with the help of a dictionary like Bischoff's or with the aid of somebody, who has a little knowledge of Latin. And a Latin diagnosis is of much use for botanists, who do not understand all modern languages.

ART. 37, addition 1.: nomina nuda in monotypic genera of LINNAEUS are to be taken as valid names (*Liriodendrum Tulipifera* L. *Buxus sempervirens* L., *Hamamelis virginiana* L., etc. Cf. *P. I.* II, no. 28).

Motive: For LINNAEUS a species in a monotypic genus did not require a speciesname (our diagnosis). Cf. P. I. II, no. 28.

Addition 2.: A species or a subdivision of a species, announced in a work with a complete name and description or reference to a sufficient former description under another name, but without the indication of a standard-specimen or standard-specimens, is not legally described, thereby the name invalid (c.f. Art. 56, al. 2 and 3).

As to species or subdivisions of species, published before the coming into force of this article, standard specimina are to be determined as soon as possible.

For further details see the new article to sect. 4. (p. 13).

ART. 38, addition: A genus or any other group of higher rank than a species, named and characterised conforming to Art. 37, but without indication of a standard species for a genus etc., is not legally described, thereby the name invalid (c.f. Art. 56 al. 2 and 3). As to genera etc. published before the coming-into-force of this article, standard species for genera etc. are to be determined as soon as possible.

For further details see the New Article to sect. 4.

Motive of both additions: cf. the existing Recommendations XVIII bis and XXXVIII, which become needless by the emendations of Art. 37 and 38. "Standard species" etc. is a better expression than "type species" etc.; the type method is inaugurated by American botanists, the standard method by Englishmen. With the standard method it is possible to take as the standard species of an existing genus such a species, which is not the historical or otherwise indicated type species, but an arbitrary one which does not cause changes of names; f.i. the original typespecies of the genus Azalea is A. procumbens L. (now called Loiseleuria procumbens Desv.) and all our Azalea's should obtain another genus name (Tsutsusi or so); with a standardspecies like A. indica L. or A. japonica Gray, the two genera names remain unaltered.

Moreover "standard" is better than "type" because, when f.i. a new genus is published, one cannot be sure that the first discovered species will appear to be in the course of time the taxonomically typical species, etc., of the new group.

Standard species and specimens are very useful and often needed to identify genera and species and to divide genera and species methodically.

New article to section 4:

- 1. The names of all species etc. of plants are to be submitted, little by little, to ascertain their validity and legality, to an International Congress, in this way:
- a. A list is made beforehand of all names, about which there is unanimity.
- b. From all names, of which the validity 1) and legality 1) are universally accepted but which are nevertheless afflicted with some kind of uncertainty, this uncertainty is to be expounded beforehand. Examples are *Pinus nigra*? Arnold, cf. P. I. 1, no. 2a; *Pinus* (L.) austriaca Loud, cf. P. I. I, no. 2a.
- c. From all names, about which there exists difference of opinion, the competing names of the same genus or species are to be put together beforehand, and explanation is to be given of the contradictory personal ideas with regard to the application of the International Rules, on which those different names rely.

<sup>1)</sup> Cf. the definitions in Art. 56, al. 2 and 3.

Examples: Pinus Pinaster — maritima, Cedrus effusa — libani or libanitica, Thyja gigantea — plicata, etc. (Cf. P. I. I, no. 2, 12, 33, etc.); Quercus rubra — borealis, Ulmus campestris — foliacea and procera, Chaenomeles japonica — lagenaria, etc., etc. (Cf. P. I. II, no. 3, 6, 21, etc.).

- d. To carry a—c into execution, the plants are to be divided into groups; f.i. hardy ligneous plants, hardy herbaceous plants (perennials, annuals), tropical ligneous plants, tropical herbaceous plants (perennials, annuals); etc., etc.; or divisions are made with regard to the geographical distribution; or special families resp. genera are taken apart. All of this depending on the readiness of institutions and persons to treat groups of any kind.
- 2. As soon as names are fixed at an International Congress, changes, based upon further research, may not be taken as valid and legal so long as they are not expounded beforehand and accepted by a following International Congress; when this takes place, the date, upon which the name was proposed and expounded in an authentic paper, is to be taken as the date of publication.
- 3. A change of name or the name of a new species or other group of plants, ought, for consideration as valid and legal name, to be published with the indications, by means of which the name may be studied and criticised. The description of a new species etc. ought to be complete (plant, branches, leaves, flowers, fruits); and dried material ought to be put at the disposal of one or more Herbaria, indicated for that purpose.

The publication is moreover to be made in one of the periodicals of different countries, indicated for that purpose. The best way would be to establish an International paper, which could be affixed as an appendix to periodicals of the different countries. (Cf. with this the proposition Sect. 4, Art. 34 of the Intern. Rules).

For horticultural varieties and Forms, horticultural papers are to be indicated in the same way.

Not only a new species etc. but its name also is submitted to approval. Instead of the principle "nomen est nomen" ought to prevail the principle "nomen est omen"; cf. P. I. II, no. 19a.

4. As to plants, of which no sufficient material is obtained to determinate the genus or the species, it would be good to give them no name but a temporary phrase, as did e.g. Thunberg in

his "Flora Japonica" of 1784; f.i. Scandens foliis ternatis; Frutex radicans foliis quinquelobis; Rhus hirsuta spinosa; etc.

5. In the meantime, whilst the names of already known species are fixed, authentic material of them is to be deposited;

1st Material, as far as possible, from the original author (or authors, f.i. in the case of species taken as synonymous), or at least indication where this authentic material is to be found.

2nd Complete material, as far as possible enlarged with drawings and photos, of the plants, which, at the time that their names are internationally fixed, are comprehended under those names.

In the cases where there are different names of a plant resulting from different opinions as to its relationship, those different names are to be put together with the same material; f.i. Berberis Aquifolium and Mahonia Aquifolium; Rhododendrum luteum (flavum) and Azalea pontica; Cornus alba s.sp. sibirica and C. sibirica.

The material sub 1st from species, described before 1900, is to be taken as of historical value; that sub 2nd as the actual authentic material. Species, described after 1900, are, as to authentic material, to be treated as new species (cf. § 3).

The task of procuring and keeping this actual authentic material, may be divided over the different Herbaria, in connection with the preparatory work sub 1st, with the geographical distribution of the plants, etc.

As far as possible all Herbaria may obtain part of this actual authentic material from the species desired; at all events photographic offprints are to be put at their disposal.

- 6. For all existing groups of plants, of which a standard-subdivision resp. specimen is not yet determined, such standard subdivisions resp. specimens are to be compiled.
- 7. The office of the Index Kewensis might be the centre for the standard herbary mentioned sub 5, for the International periodical sub 3 and for the lists of plants and the explanations mentioned in the different articles of this paper.

Motive: Systematic botany has already been practised for many years by professional botanists and by amateurs. It is a matter of course that many of them do not even know more or less exactly the rules and recommendations of nomenclature and that others do not mind them more or less. And those, who know and mind them and try to apply them consciously, have their personal ideas in their interpretations; no rule, how excellent it may be, will exclude all differences of opinions; and all differences of opinions give rise to different names for the same plant.

As in all Sciences and also in Industry and Trade, co-operation, as closely as possible, and subordination are needed nowadays, to prevent unfruitful troubles, loss of labour and time. Only Art may allow the luxury of personal ideas and independence.

But co-operation requires concentration and supervision to act well, which means, in our case, to result in a harmonious system of plantnames.

ART. 43, addition: The author's name of a subspecies or variety remains unaltered when the genus or species name or both of them is (are) changed into a synonymous name. F.i.

Pinus laricio Poir. s.sp. austriaca Endl.

,, nigra Arn. s.sp. ,, Endl. and not Asch. & [Graebn.

Pseudotsuga Douglasii CARR. var. Fretsii Beissn.

" taxifolia Britt. " " Beissn. an not [Rehd.

Motive: Cf. P. I. I, no. 2a. We have a binominal nomenclature, the generic and the specific name belonging together as a whole. But the name of a subspecies or a variety stands apart. When a species is moved to another genus, then its characters are estimated in another way and the subspecies and varieties are to be taken, like the species, as new ones. But if the species remains quite the same, only obtaining another but synonymous name, then our nomenclature rules require for the species an other author's name; but the subspecies and varieties, belonging to that species, do not change in any way, nor need another author. We have no trinominal nomenclature.

ART. 44, to read: ....certain, but not the standard-, elements...

ART. 45, to read: When a genus is divided into two or more genera, the name must be kept and given to the division, which contains the assumed standard group or species. If there is no such standard group or species assumed, then this must be done before dividing the genus.

ART. 46, addition: The standard subgroup or species of the group, whose name is retained, becomes the standard subgroup or species of the new group.

ART. 47, to read: When a species or subdivision of a species is divided into two or more groups of the same nature, the name is retained for the group, which contains the standard subgroup or specimen. If there is not yet assumed such a standard, it must be done now.

ART. 49. This article ought to be omitted. In 1905 it has served as a compromise between the partisans of the absolute priority and those of the Kew Rule. According to the reporter it was difficult to say which of the two parties made the greater concession. But in reality there was no compromise at all! Art. 49 demolished part of the absolute priority but the whole Kew rule; art. 49 is not in accordance with either of them. Only Dr. HALLIER noticed it and protested, but in vain; a congress is not the fit place for quiet deliberation!

Now we have f.i. Abies Lowiana Gord. = A. concolor var. lasiocarpa Eng. & Sarg. (not A. lasiocarpa Nutt. = A. subalpina Engelm.) instead of var. Lowiana; Clematis texensis Buckl. = C. Viorna var. coccinea Gray instead of var. texensis. The oldest valid plantname of Juniperus nana Willd. as a species is J. sibirica Burgsd., but as a variety it is J. communis var. saxatilis Pall. Cf. P. I. I, no. 27 and 30; for Clematis texensis see Yearbook of the Dendr. Soc. of the Netherl. 1928, p. 102.

ART. 50, to intercalate after "reject": on his own account. To intercalate after "better known": or because it relies on an erroneous determination or interpretation, or because of errors in the description.

Motive: It is far better to apply the rules strictly and to put undesirable names on a list of nomina rejicienda.

To omit: "Which is universally regarded as non-valid."

Motive: see motive of next Recommendation.

ART. 50, to add a new Recommendation: Every one is requested to inform an International Commission, established to that end, of wishes with respect to changing or modifying of names as mentioned above.

A report of all the names will be put before an International Congress, which decides about them.

For the question of "earlier homonyms" see also the new article after Art. 24.

Motive: in this way an International Commission is able to gather all names, which are in the eyes of some botanists undesirable, to see if and how far changing of the names is practicable and to make a proposal at the next International Congress.

Doing away with badly chosen, insipid names etc., is making nomenclature more intelligible, thereby more practical and surer, and botanists more unanimous. Cf. for insipid names P. I. II, no. 19a; for an example of a description with errors P. I. II, no. 12 (Schoutenia ovata); for examples of names relying on erroneous determination or interpretation and which give rise to changing of names cf. P. I. I, no. 6 (Pinus inops Bong.) II, no. 23b (Acanthopanax pentaphylla MARCH.) 1) and II, no. 26 (Azalea calendulacea Hook, et Arn.); other such examples are Dalbergia Pseudosissoo Miq., Cyperus umbellatus Benth. For ephemeral names cf. P. I. II, no. 6 (Ulmus glabra Huds.), 11b (Vitis Kaempferi Koch), no. 26 (Rhododendrum luteum SWEET) and no. 28 (Halesia carolina L.). A nomen erraticum is Quercus borealis J. J. SMITH (cf. P. I. II, no. 3).

In the second place, that International Commission obtains in this manner a summary of the existing "earlier homonyms" and may divide them into those which are unconditional and those which are conditional synonyms<sup>2</sup>). As to the first mentioned

<sup>1)</sup> To read in P. I., p. 48, 49, 56 (footnote), 64 (l. 11) and 71 (Prop. no. 16) MARCHAL instead of MARSHALL.
2) Mr. Sprague gives in "Imperial Bot. Conference" 1924, p. 303 two examples; one of them is *Inula squarrosa* L. 1763 and BERNH. 1800. He argues that if we are not able to ascertain BERNHARD's views on *I. spinality in I.* 1759 so we cannot say whether I argues I argue that the same than the same racifolia L. 1759 so we cannot say whether I. squarrosa BERNH. was a legal name or not; and thereupon depends if, with BERNHARD's view, it was an unconditional or a conditional synonym.

We may prevent all such difficult cases by assuming that a species name like *I. squarrosa* is to be taken as a conditional synonym if it is nowadays thought possible that *I. squarrosa* L. will be at any time recognised as a separate species beside *I. spiraeifolia* L.; if so, then the later homonym I. squarrosa BERNH. is to be rejected and changed as to the name or to be put on a list of nomina homonyma conservanda; if not so, then the later homonym I. squarrosa BERNH. remains legal and unchanged. In such a way all generic and specific homonyms may be treated, which are not undubitable unconditional synonyms.

Examples of undoubtless unconditional synonyms are Linum multiflorum LAM., Cedrus effusa SAL., G. patula SAL., Cornus tatarica MILL.

division of homonyms, their "later homonyms" may not be changed; as to the second division those names of "later homonyms" will be selected, which come into consideration to be put on a list of "nomina homonyma conservanda"; for the remaining "later homonyms" new names are to be invented in collaboration with the botanists, who informed the commission about the "earlier homonyms" concerned.

As specific homonyms are more confusing than generic homonyms because of the closer relationship, there may also be made a list of rejicienda nomina specifica homonyma, which are legal "earlier homonyms" but which cause confusion. F.i. Cornus alba L. is a legal "earlier homonym" of C. alba Wgh. 1787, which is to be rejected because C. alba L. 1767 was unjustly replaced by C. tatarica Mill. 1768; and C. alba Wgh. is therefore replaced by C. stolonifera Mich. 1803. But the name C. alba is still often used in the sense of Wangenheim; so the two species are often confused by the homonym alba. Cf. also Cytisus albus Lk and C. albus Hacq. in P. I. II, no. 14.

ART. 511, to read instead of valid: legal.

Motive: "legal" includes validity, but "valid" does not include legality. (Cf. Art. 56 for these two expressions.)

ART. 55<sup>2</sup>, addition 1: when it non-literally but essentially repeats the generic name; f.i. *Halimodendrum Halodendrum*, *Cyperus cyperoides* O. K. (Revisio), *Cyperus cyperinus* V. Sur. (Het geslacht Cyperus s.a., 1898).

Motive: Cf. for Halimodendrum Halodendrum P. I. II, no. 13; cf. Sprague in Journal of Botany 1921, p. 155 (...."A Bauhinia like a Bauhinia and a Bridelia with the leaves of Bridelia verge periously on nonsense"....).

Mr. Sprague in England counted in 1921 (Journ. of Bot. 1921, p. 155) tautological and suchlike names under species names which are apt to excite ridicule and he thinks they should be rejected. But in 1924 Sprague defended them, and the "Imperial Bot. Conference" carried his proposal to have revoked the rejecting of "duplicating binominals". Sprague gives four reasons (l.c., p. 302):

(1) "Their rejection prevents the first specific name from being retained." Of course, that just makes the question; but one may

say, in another way, that most or all of the insipid tautological names are later than the first intelligent name and that for him, who does not acknowledge tautological names, these tautological names prevent the first specific binominal from being retained.

- (2) "Their rejection often necessitates a long investigation in order to discover the next available name"; of course, but that work has been done already for the greatest part and does not want to be undone to get back insipid names. And even when the tautological names were given and retained without that work, it should be done afterwards; for we must know what plants all names in literature represent.
- (3) "....Owing to the rejection of duplicating binominals 18 species have borne 43 names during the period 1900—1923"; of course, many botanists do not apply the Rules rightly; that does not depend especially on tautological names; and these wrong names do not disappear by recalling the tautological names. Sprague gives examples; f.i. two dendrological names, Cydonia Cydonia and Amelanchier Amelanchier. But notwithstanding the little difference of opinion about the right name, it is clear that C. Cydonia must be called C. oblonga MILL. and A. Amelanchier: A. ovalis Med. There is no confusion nor difficulty.
- (4) "Even when the name is finally fixed it is often unsatisfactory, e.g. Calamagrostis canescens is an albino form." Of course, that was to be expected in some cases; but that may not be a reason to resuscitate the whole set of unsatisfactory, because insipid, tautological names.

Addition 2: When the resulting species name is the combination of two generic names, which have been or are used in different senses. *Picea Abies Karsten*, *Abies Picea Lindley* 1), *Scirpus Eriophorum Mich*.

Motive: They cause confusion. Cf. P. I. I no. 23a.

ART. 56, to read instead of the second alinea:

The author of a new combination may, if he wishes, borrow the specific epithet from an older valid but non legal binominal, which is an unconditional synonym, or make use of a new one.

<sup>1)</sup> To read in P. I. I, p. 61, line 12 from beneath: Silverfir instead of Common Spruce; line 8 f.b.: LINDLEY instead of KARSTEN; and to omit on p. 62 line 22: (LINDLEY).

By valid name is implied the name of a group (genus, species, etc.) of names, technically formed in accordance with the rules of name building.

By legal name is implied the valid name of a group which is in accordance with the rules of nomenclature in respect to the other existing species.

Examples: Lignum would be an invalid name; Abies equi trojani ASCH. & SINT., A. Borisii regis MATTF. are invalid names; a nomen nudum is an invalid name; Linum multiflorum LAM. is a valid but an illegal name.

Motive of the first alinea given here: it is in accordance with the additions to Art. 24 and 27. "Still-born" names are only a part of the names which come into consideration for the new combination. A name may be vitally born but may afterwards fall for ever into the synonymy. Moreover, still-born names must be judged as such with respect to the time in which they were born; that may be often a difficult and unfruitful research. (Cf. f.i. Inula squarrosa Bernh. in Motive of the addition to Art. 50.) The conditionality or unconditionality of a synonym on the other hand may be judged with respect to the present time.

ART. 57, to read: The spelling of names of plants takes place according to the original names from which the plantnames are derived, and according to the rules of Latin and Latinization.

Examples: Gleditschia, silvestris, sinensis, Xanthoxylum, Pentastemon; Evonymus (the u of the Romans became u consonans, that is our v). But we may continue to write Euberberis, etc. See Yearbook Dendr. Soc. of the Netherlands, 1928, p. 106.

A deviating spelling makes a name not invalid; but everyone is allowed to correct it. (Motive: so it is now with the actual rule of 1905; my proposal does not change the real state of things.) Cf. the proposed Recommendations to Rec. IV and VIII—XIV.

ART. 57, new Recommendation: Every one is requested to inform an International Commission about mistakes in the usual spelling of names and to give the corrections; f.i. Diervillea instead of Diervilla, Pawia i. s. o. Pavia. The Intern. Commission acts as in the addition to Art. 50.

Motive: Correcting names does not cause confusion but makes nomenclature in the end easier and more intelligible. Names, which are given in honour of a botanist or another person, ought to have the name of that botanist or person correctly spelled. The original spelling of the plantnames shows so many deformities and contradictions between them that it is not possible to retain them in one's memory; and in indices, catalogues, etc. they give trouble with respect to the alphabetical series.

#### CHAPTER IV.

ART. 58 to read: The rules of botanical nomenclature can only be modified by an International Congress with the aid of competent persons or commissions, convened for the express purpose.

Recomm. XXXVIII becomes unnecessary when authentic material is obligatory (see the proposed addition to Art. 37 and 38).

#### NEW CHAPTER IVa.

On behalf of **Catalogues**, **Seedlists** and other papers of general use, a separate list of names is to be compiled, whereby all existing questions of relationship are decided in one or another sense. F.i. Rosaceae sensu amplo or Spiraeaceae etc.; Berberis and Mahonia as separate genera or Berberis incl. Mahonia; Abies concolor s.sp. lasiocarpa or A. Lowiana; the result being that in all papers of the above mentioned kind the same families, genera, species, etc. appear, in the same meaning; cf. also the proposed new article 28a, 2nd al.

To obtain unity in the mentioned papers, temporary decisions might be taken with regard to dubious names, about which an International Congress has not yet given a final decision. These temporary names ought to be indicated in a special manner.

Motive: Disagreement with respect to relationship will always exist. F.i. Rosaceae is one family sensu amplo in E. u. Pr. "Nat. Pfl. Fam." and in Rehder's "Manual"; in Schneider's "Laubholzkunde" there are Spiraeaceae, Rosaceae, Drupaceae and Pomaceae. You find in E. u. Pr. "Die Nat. Pfl. fam." Pirus (incl. Malus, Sorbus, Aronia) and Mespilus (incl. Crataegus); in Tarouca's "Laubgehölze" Pirus, Malus, Sorbus (incl. Aronia), Mespilus and Crataegus; in Bailey's "Cyclopedia" Pirus (incl. Malus), Sorbus, Aronia, Mespilus and Crataegus; in Schneider's

"Laubholzkunde" and REHDER's "Manual" Pirus, Malus, Sorbus, Aronia, Mespilus and Crataegus.

Eschscholtzia contains in Jepson's "Flora of Calif." 9 species, in Engler's "Pflanzenreich" 123 species; the plants are in both the same. Acer californicum Dietr. is a variety in Tarouca's and Rehder's Handbook, a species in Schneider's.

All these disagreements give troubles and misunderstandings in using Catalogues, Seedlists, etc.

Final proposition, to make the following actual Recommendations to rules: II, III, Vb and g, VIc, IX, XI, XIVe, f, h, i, XV, XVII—XX, XXVI 1, XXVII—XXIX, XXXI, XXXVIII; moreover the following proposed new Recommendations: IV 1—3, V 1—4.

Motive: to obtain unity and intelligence in nomenclature; cf. on p. 13 the last alinea of § 3 of my proposed new article to section 4.

### APPENDIX

- Nomina specifica conservanda (to be retained in all cases).
- Nomina specifica rejicienda (to be rejected with respect to the species in the first column).
- 1. Pinus maritima MILL. Dict. VIII 1768.
- P. pinaster Sor. in Arr. Hort.Kew. 1789.
- 2. " montana MILL. Diet. VIII 1768.
- P. Mughus Scop. Flor. carn. 2nd ed. 1772, P. Mugo Turra Flor. It. Prodr. 1780.
- 3. ,, contorta Loud. Arb. et Frut. 1838.
- P. inops Bong. (non Sol.) Obs. Sitka in Mém. Ac. Pét. 1833.
- 4. Larix americana Mich. Fl. bor. Am. 1803.
- L. laricina Koch Dendr. 1872, L. intermedia Lk Linnaea XV. 1841, (Pinus Dur. H. W. B. 1800), L. pendula SAL. Linn. Transact. 1807 (Pinus Sol. in Air-Hort. Kew. 1789).
- 5. " sibirica LEDEB. Fl. Alt. IV 1833.
- L. intermedia (Pinus Fisch.) (1) Turcz. Catal. in Bull. Soc. imp. nat. Mosc. I. 1838.
- 6. , dahurica CARR. Conif. 1855.
- L. pendula SAL. Linn. Transact. 1807, L. Gmelini Pilg. (Abies – RUPR. Flor. Samoj. in Beitr. Pfl. K. Russ. Reich II, p. 56),/\*\*5
- 7. " leptolepis Gord. Pin. 1858.
- L. Kaempferi SARG. Silva XII, 1898 (Pinus – LAMB. Genus Pinus II. 1824).
- 8. Pseudolarix Kaempferi Gord. Pin. 1858.
- Ps. amabilis Rehd. Journ. Arn. Arb. I, p. 53, 1919 (Larix - Nelson Pinaceae, 1866).
- 9. Cedrus libani Trew Cedr. lib. hist., 1757.
- C. libanitica LK Handb. II, p. 480, 1831, PILGER in E.u. PR. Die Nat. Pfl. Fam. ed. II 1926, C. patula Koch Dendr. II. 1872 (Larix-Sal. Transact. Linn. Soc. VIII, 1807), C. effusa (Pinus Cedrus-) Voss Wörterb. 1922, (P. Sal. Prodr. Stirp. 1796).
- Picea ajanensis Fisch. in Trautv. & Mey. Flor. ochot., 1856.
- P. jezoensis CARR. Conif. 1855. (Abies - S. u. Z. Flor. jap. II, 1842).
- 11. ,, Alcockiana CARR. Conif. Ed. 2, 1867.
- P. bicolor MAYR Abiet. Jap. Reich. 1890.
- 12. " Morinda LK in Linnaea XV. 1841.
- P. Smithiana Borss. Flor. Orient. 1884 (Pinus - Wall. Pl. as. rar. 1832).
- 13. " rubra LK Linnaea XV. 1841.
- P. americana n.c. (Pinus GAEBIN. Fr. Sem. II. 1791).

- 14. Picea canadensis B. S. P. Prel. Cat. 1888.
- 15. Picea sitchensis CARR. Conif. 1855.
- 16. Tsuga Pattoniana SÉNECL. Conif. 1867.
- 17. " Mertensiana CARR. Conif. Ed. 2. 1867.
- 18. Pseudotsuga Douglasii CARR. Conif. Ed. 2. 1867.
- 19. Juniperus nana WILLD, Berl. Baumz. 1796.
- Thyja gigantea NUTT. Rock. Mts pl. in Journ. Phil. Acad. VII 1, 1834.
- 21. Abies alba MILL. Dict. VIII. 1768.
- 22. Picea excelsa Lk in Linnaea XV. 1841.
- 23. Populus balsamifera L. Sp. pl. 1753 sensu Eur.
- 24. ,, deltoides Marsh. Arb. Am. 1785.
- 25. Quercus rubra DUR. Harb. W. Baum7. 1772 non L.
- 26. ,, falcata Mich. Hist. Chènes Am. 1801 (digitata Südw. Gard. For. V. 1892).
- 27. Betula alba L. em. Roth Tent. Flor. Germ. I. 1788.
- 27a.Alnus glutinosa GAERTN, Fr. Sem. II. 1791.
- 28. Ulmus campestris L. Sp. pl. 1753 em.
- 29. Magnolia denudata Lam. Enc. Méth. III. 1789.
- 30. " precia CORREA in Vent. Malm. nr. 24, note, 1803, Dun. Traité 2nd ed. vol II. p. 180, 2604.

- P. glauca Rehd. Journ. Arn. Arb. I, 1919 (Pinus – Mönch Verz. Weiss. 1785, Voss Wörterb. 1922).
- P. Menziesii Carr. Conif. ed. 2, 1867, P. falcata n.c. (Abies - Raf. Ati. Journ. 1832).
- T. Mertensina Sarg. Silva XII, 1898 (Pinus – Bong. Obs. Sitka in Mém. Acad. Pét. 1833).
- T. heterophylla Sarg, Silva XII, 1898 (Pinus - Raf. Atl. Journ. 1832), T. Albertiana Sénect. Conif. 1867%.
- P. taxifolia Britt. Transact. N. Y. Ac. Sc. VIII, 1889 (Pinus – LAMB. Genus Pinus I, 1803), P. mucronata Sudw. Contr. U. St. Nat. Herb. III 4, 1895 (Abies – RAF. Atl. Journ. 1832).
- J. sibirica Burgsd. Anl. 1787.
- Th. plicata D. Don in Lamb. Pinus I. 1803, sensu Americ.
- A. Picea Lindl. Penn. Cycl. I. 1833.
- Picea Abies Karsten Pharm, Med. Bot. 1881, p. 324.
- P. tacamahaca MILL. Dict. VIII. 1768.
- P. balsamifera L. Sp. pl. 1753, sensu Americ.
- Q. borealis J. J. SMITH in MICH. f. North Am. Sylv. 1819.
- Q. rubra L. Sp. pl. 1753.
- B. pubescens Ehrh. Beitr. VI. 1791.
- A. vulgaris HILL Br. Herb. 1756.
- U. foliacea Gil. Exerc. Phyt. II, 1792 or U. procera Sal. Prodr. 1796.
- M. liliflora Lam. Enc. Méth. III, 1789, sensu Rehd.
- M. liliflora Lam. Enc. Méth. III, sensu Sur.

- Magnolia hypoleuca S. u. Z.
   Abh. Bayr. k.k. Wiss. IV
   1846.
- 32. Clematis coccinea (ENGELM.) KOEHNE Dendr. 1893.
- 33. Akebia lobata Decne Ann. Sc. Nat. II 12, 1839.
- 34. Tilia europaea L. Sp. pl. 1753 em.
- 35. " americana L. Sp. pl. 1753.
- 36. Ailanthus glandulosa Desr. Mém. Par. 1789.
- 37. Celastrus orbiculata Тн. Fl. jap. 1784, p. XIII.
- 38. Evonymus alata RgL Fl. Ussur. 1861.
- 39. Vitis Coignetiae Pull. ex Planch. in Journ. Vigne Am. 1883.
- 40. Lespedeza Sieboldii Miq. Ann. Mus. L. B. III. 1867.
- 41. Exochorda grandiflora Lindl. Gard. Chron. 1858.
- 42. Hydrangea opuloides Косн Dendr. I. 1869.
- 43. Rhodotypus kerrioides S. & Z. Fl. jap. I. 1835.
- 44. Malus rivularis ROEM. Syn. Rosifl. 1847.
- 45. Chaenomeles japonica LINDL. Transact. Linn. Soc.XIII. 1822, sensu Europ.
- 46. Chaenomeles Maulei Schn. Laubh. I. 1906.
- 47. Crataegus Carrierii Carr. Rev. Hort. 1883.
- 48. Aralia mandshurica SEEM.Journ.
  Bot. VI. 1868 (Dimorphanthus Maxim. Mém.
  Ac. Pét. IX. 1859)

- M. obovata Thuns. Transact. Linn. Soc. 2, 1794.
- C. texensis Buckl. Proc. Ac. Nat. Sc. Philad. 1861.
- A. trifoliata Koidz. Bot. Mag. Tokyo XXIII, 1909 (Clematis – Th. Transact. Linn. Soc. II, 1794).
- T. platyphyllos Scor. Fl. Carn. ed. 2, 1772.
- T. glabra VENT. Monogr. Tilleul in Mém. de l'Inst. IV, 1802.
- A. altissima Swingle Wash. Ac. sc. VI, 1926 (Toxicodendrum - Mill. Diet. VIII, 1768).
- C. articulata TH. Fl. jap. 1784, p. 97.
- E. striata Loes. Engl. Jahrb. XXX 1902.
- V. Kaempferi Koch Hort. Dendr. 1853.
- L. formosa KOEHNE Dendr. 1893 (Desmodium - Vogel Nov. Act. Nat. Cur. XIX, suppl. I, 1843).
- E. racemosa Rehd. in Sarg. Pl. Wils. I, 1913 (Amelanchier -Lindl. Bot. Reg. 1847).
- H. maerophylla Dec. Prodr. IV, 1830 (Viburnum – Тн. Fl. jap. 1784).
- Rh. scandens Mak. Bot. Mag. Tokyo XXVII, 1913 (Corchorus - Th. Transact. Linn. Soc. II, 1794).
- M. fusca Schn. Laubh. I, 1906 (Pirus Raf. Med. Fl. N. Am. II, 1830),
   M. diversifolia Roem. Syn. Ros. 1847 (P. Bong. Mém. Ac. Pét. VI, 2, 1833).
- Ch. lagenaria Koidz. Bot. Mag. Tokyo XXIII, 1909 (Cydonia – Duh. Arb. et Arb. 2e éd. VI, 1815).
- Ch. japonica LINDL. Transact. Linn. Soc. XIII, 1822, sensu americ.
- C. Lavallei Lav. Arb. et Frut. Segrez. 1885.
- A. elata SEEM. Journ. Bot. VI. 1868 (Dimorphanthus - Miq. Comm. phytogr. 1840).

- 49. Acanthopanax pentaphyllus March. Bull. Soc. Bot. Belge XX, 2, 1881.
- 50. Nyssa aquatica L. Sp. pl. I. 1753 em. Koch.
- 51. Rhododendrum calendulaceum TORR. Fl. N. a. M. Un St. I. 1824.
- 52. ,, nudiflorum Torr. Fl. N. a. M.Un. St. 1824.
- 53. ,, flavum D. Don Gen. Syst. III, 1834.
- 54. ,, occidentale GRAY Bot. Cal. I. 1876.
- 55. Azalea occidentalis Torr. & GRAY Pac. R. Rep. IV. 1857.
- 56. , calendulacea Місн. Fl. Bor. Am. I. 1803.
- 57. ,, nudiflora L. Sp. pl. 2nd ed. 1763.
- 58. Symplocos crataegoides Buch. ex D. Don Fl. Nepal. 1825.
- Halesia tetraptera Ell. Phil. Transact. Roy. Soc. vol.
   1761, Linn. Sp. pl.
   2nd ed. 1763.
- 60. Symphoricarpus racemosus Mich. Fl. Am. bor. I. 1803.

- A. Sieboldianus Mar. Bot. Mag. Tokyo XII, 1898.
- N. uniflora Wgh. Beitr. N. Am. Holzart. 1787.
- Rh. luteum Schn. Laubh. II Nachtr. 1912, Rh. rubrum Sur. Het Arb. 1908 1).
- Rh. luteum V. Sur. Het Arb. 1908, Rh. rubrum V. Sur. Het Arb. 1908 1):
- Rh. luteum Sweet Hort. Brit. 2nd ed. 1830.
- Rh. calendulaceum Hook. et Arn. Bot. Beech. Voy. 1841 non Torr.
- Azalea calendulacea Hook. et Arn. Bot. Beech. Voy. 1841 non Mich.
- Azalea lutea L. Sp. pl. 1753 sensu Americ., A. rubra MEERB. Pl. sel. ic. 1798.
- Azalea lutea L. Sp. pl. 1753 sensu Sur.
- S. paniculata Mak. Bot. Mag. Tokyo XVII, 1903.
- H. carolina L. Syst. Nat. X, 1759.
- S. albus BLAKE in Rhodora XVI, 1914 (Vaccinium - L. Sp. pl., 1753).

For motive cf. P. I. I and II; for Clematis texensis and Evonymus alata see Yearb. Dendr. Soc. of the Netherlands 1928 p. 102. Summary:

Pinus maritima MILL. is put on the list of nomina conservanda because, in my opinion, it is the legal name (so also no 15 of the list); Pinus montana MILL., because P. Mugo Turr. is, beside var. Mughus, a less suitable name and P. montana a very usual

<sup>1) &</sup>quot;Het Arboretum der Rijks Hoogere L. T. en B.b. School te Wageningen" in "Meded. L. H. S." Dl III. 1910. Cf. also\_,,Ueber die Nomenklatur einiger Gehölzarten" in "Mitt. der

Cf. also "Ueber die Nomenklatur einiger Gehölzarten" in "Mitt. der Deutsch. Dendr. Ges. 1923, p. 18—23; "Personal Ideas etc." in Med. R. H., Leiden, no. 56, 1928, p. 54—57.

name moreover; P. contorta Loud., because P. inops Bong. non Sol, is the legal name but, relying on a wrong interpretation or determination, does not deserve a confusing change of name: Larix americana Mich., because L. laricina is an almost-tautological and insipid name; L. dahurica, because L. Gmelini Pilg, is a very unusual name (so also no. 13, 19, 27a, 51-57); L. leptolepis GORD., because in my opinion REHDER's L. Kaempferi is an illegal name (so also no. 7, 20, 23-25, 29, 30, 32, 35, 45, 46, 49, 60); Cedrus libani Trew, because I take a binominal species-name for legal, notwithstanding it is published in a work which does not give in principle binominals, and because the name is much more used than C. libanitica; Picea ajanensis, because Abies Jezoensis S. & Z. is a dubious species (so also no. 11, 17, 36, 40-44, 47, 48, 56); P. morinda, because the names morinda and Smithiana are equally old but the name morinda was first provided with an adequate description and is more used; P. canadensis B. S. P., because I do not accept the retro-action of REHDER's principle of conditional synonyms as being illegal and causing confusion; Tsuga Pattoniana Sén., because of the crossexchange of names with Ts. Mertensiana (so also no. 26, 31): Pseudotsuga Douglasii CARR., because Pinus taxifolia LAMB. is a very dubious species, built from mixed-up material, belonging to other species than Ps. Douglasii (LAMBERT himself was glad, so he writes in the second edition of his work, when he had got real Douglasfir material, to accept the name Douglasii of LINDLEY) and because Abies mucronata RAF. is unsufficiently described.

Picea excelsa LK is put on the list, because Picea Abies is a combination of two generic names, which are both still in use; Betula alba L. em. Roth, because this is conforming to Art. 27 of the International Rules (so also no. 28, 34, 50); Celastrus orbiculata TH., because C. articulata TH. relies on a printer's error; Rhododendrum flavum D. Don, because Rh. luteum Sw. is an ephemeral name (so also no. 59) and a confusing name too; Halesia tetraptera Ell., because Linnaeus himself changed his H. carolina rightly into tetraptera Ell., and H. carolina is moreover an ephemeral name.

Wageningen (Holland). February 1929.

# PROPOSITIONS

ON THE INTERNATIONAL RULES OF BOTANICAL NO-MENCLATURE IN REGARD TO THE INTERNATIONAL BOTANICAL CONGRESS IN LONDON 1930

BY

Dr. J. VALCKENIER SURINGAR. (Febr. 1929.)

Supplementary remarks to:

ART. 15 addition: it might suffice to put this case in the form of an example under Art. 53.

Rec. IVb: The building of names ending in *erus* from names of persons has nothing to do with classic Latin but originated in the Middle Ages. We can only say that *erus* is more in concert with the spirit of classic Latin than *erius*; but we cannot say that *erius* is wrong.

New article after Art. 24; Art. 27 add.: with nomina homonyma conservanda are meant *later* homonyms.

ART. 26, add. 4: The name of the so called ,,typical" subspecies resp. variety might always be primarius;

ART. 28a, b: If a majority wishes to keep the term varietas for smallspecies-varieties, the character-varieties could be called forma and the specimen-varieties forma specialis. F.i. Chamaecyparis Lawsoniana forma glauca f.sp. "Kooy"; Cornus alba var. sibirica forma fol. aur. marg.

ART. 32: This proposition does not distinguish between asexual and sexual intergeneric hybrids; if this is wanted, it might be done by giving two different generic names or, as REHDER propo-

1) Forma specialis in the sense of the present use could be called forma parasitica.

ses, by putting + before an asexual,  $\times$  before a sexual hybrid, or by both means.

The motive at the end of ART. 32 belongs to ART. 31-33.

ART. 37, add. 1: Nomina nuda are names which are published without a sufficient description or a reference to a former sufficient description under a different name from the year 1753 or later (ART. 19, 37). An example is *Pinus Mugo* Turka 1765 with insufficient description and with reference to a description of Seguier in Pl. Veron. from 1745.

ART. 55<sup>2</sup> add. 2: to change the wording in this way: when the resulting species name is the combination of two generic names, which are used or where used within the last 50 years for distinct genera.

Art. 50 note 2, Art. 56: Names like Linum multiflorum LAM. and Larix patula SAL. are nomenclaturally illegal names; Inula squarrosa BERNH., if I. squarrosa L. is taken as a conditional synonym, is a taxonomically illegal name.

May 1929.

## PROPOSITIONS

ON THE INTERNATIONAL RULES OF BOTANICAL NO-MENCLATURE IN REGARD TO THE INTERNATIONAL BOTANICAL CONGRESS IN LONDON 1930

(WITH SUPPLEMENTARY REMARKS ON A SEPARATE SHEET)

BY

Dr. J. Valckenier Suringar. (Febr. 1929.)

### Supplement.

Addition 2 to Art. 43: The nomenclature of character- and specimen-varieties begins for Coniferous plants with the first edition of Beissner's "Handbuch der Nadelholzkunde" 1891 and for the other phanerogamous plants with Nicholson's "Dictionary of Gardening" 1884 or with its French translation by MOTTET in 1892—'97.

Motive: Anterior to these works it is often not possible to identify the varieties and to find out the oldest valid name and description. — Beissner's work is the first modern monograph of Coniferous varieties, completed by him in a second edition and in the "Mitteilungen der Deutschen Dendrologischen Gesellschaft."

New Art. 28a, al. 4, l. 1., to add in a note: fastigiatus to be used in the cases that is meant a variety with the branches obliquely erected; fasciculatus would be still better but is unusual. Pyramidalis may continue to be used for conical forms of tree-species. Now the two terms are mixed up. We have Taxus baccacta with a real var. fastigiata and a real var. pyramidalis.

Addition to the supplementary remark to the proposed new Articles 28a, b: "Forma specialis" in the sense of the present use could be called **forma parasitica**.

Addition to Art. 55<sup>2</sup> add. 1 sub (3), to be inserted at the end of it:

If there is difficulty, one or more of the competing names can be put on the list of "nomina dubia" or on that of "nomina rejicienda", so that there is only one left to be the legal name.

To add on p. 20, Art. 57, at the end of al. 2 (Examples): and 1929 p. 49—56 ("Minor nomenclature questions").

Addition in the Appendix on p. 23 to the list of nomina specifica

	conservanda	et	rejicienda:	
13a.	Picea excelsa Lk (Pinus		Picea rubra Dietr. Flora Berl	
	LAM. Fl. franç. 179	8).	1824 (Abies — HILL Br. He	rb.
			1756).	

28a. Ulmus scabra Mill. Dict. Ulmus glabra Huds. Fl. Angl. 1768. Ed. 1, 1762.

For motive cf. resp. P. O. III, Summary in English p. 34 and P. I. II, p. 19; *Ulmus glabra* HUDS. is an ephemeral and confusing name.

Wageningen, May 1930.

### N.B.

"As long as there will remain names of bad taste, not correct as to derivation and signification, unmethodical, ambiguous, etc., so long there will be botanists and practical men, who set value on good taste, correctness, method and unambiguity, who therefore object to those names and change them to their liking; and so long there will be no unity. Sapienti sat; sapere aude!"

(Jaarboek Ned. Dendr. Ver. 1929, Summary, p. 55/6)

### LITERATURE TO BE ADDED IN APPENDIX OF PRO-POSITIONS ON THE INTERN. RULES OF BOT. NOMEN-CLATURE (CONGRESS LONDON 1930)

### ву

### Dr. J. VALCKENIER SURINGAR.

- No. 2. P. Mugo Turra Giorn. d'Italia 1765.
- " 4. Larix laricina Koch (Pinus Dur., Diss. 1771).
- ,, 6. ,, Gmelini Pilg. Nat. Pfl. Fam., ed. II, Conif. 1926 (Abies Gmelini Ruph., 1845).
- " 9. Cedrus libanitica TREW l.c., LK Handbuch etc.
- ,, 11. Picea bicolor MAYR (Abies MAX. Bull. Ac. Pét., X, 1866).
- , 12. , Morinda LK (Abies LAWS. Manual, 1836).
- , 14. " canadensis B. S. P. (Abies MILL., Dict., 1768).
- ,, 15. ,, Menziesii CARR. (Abies LINDL., Penny Cycl., 1833).
- ., 21. Abies Picea Lindl. (Pinus L. Sp. pl., 1753).
- " 22. Picea Abies Karsten (Pinus L. Sp. pl., 1753).
- " 38. Evonymus alata RGL (Celastrus THUNB., Fl. jap., 1784).
  - striata Loes. (Celastrus Thunb., Fl. jap., 1784).
- " 51. Rhododendrum luteum Schn. (Azalea L. Sp. pl., 1753).
  - ,, rubrum V. SUR. (Azalea MEERB., Pl. sel. ic., 1798).
- ,, 52. ,, luteum V. Sur. (Azalea L. Sp. pl., 1753).
- " 58. Symplocos paniculata Mak. (Prunus Thunb., Fl. jap., 1784).