

Chemotaxonomy
of
Flowering
Plants

Volume I

R. Darnley Gibbs



CHEMOTAXONOMY OF FLOWERING PLANTS

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VOLUME I
CONSTITUENTS



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JUNE, 1974 NOTES, QUERIES AND ERRATA

Professor G. Ourisson has very kindly pointed out two errors in the figure included in the promotional leaflet for this book. I am very grateful to him since his action has prompted me to recheck virtually all the formulae in the 189 figures of the text. This hasty check has revealed what is to me a shocking number of errors (mostly of a minor nature), as well as many cases in which I am unsure of the formulae. I have therefore prepared the following list, which I hope is substantially complete.

It is but a slight consolation to report the detection of several errors in the reference books available to me, and to note that *chemists* (I am a *botanist*) seem as liable to get plant names wrong as I am to err in my formulae.

p. 137 *Meloscine* —H on N; double bond at right of ring at top right?

Fig. 12 (p. 141) *Acronycine* —OCH₃ at top right as in *evoxanthine*

Fig. 14 (p. 145) *Mescaline* —NH₂, not —NH₃

Fig. 18 (p. 167) *Lycoctonine* —C₂H₅, not —CH₂.CH₂OH on N

p. 173 *Dendrobine* —CH₃ missing (I have it correctly in fig. 42 on p. 229)

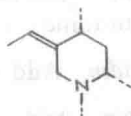
Fig. 20 (p. 177) *Bufotenine* —H on N

Fig. 27 (p. 193) *Cylindrocarpine* —OCH₃ as in *aspidospermine*?
Meloscine double bond on right of ring at top right?

Fig. 28 (p. 196) *Pyrifoline* —COOCH₃ in position of —OH of *kopsine*?

Fig. 29 (p. 198) *Obscurinervine* Add 2 —OCH₃ groups to left-hand ring; double bond at right of ring at top right; =O next to —O— in ring at lower right? *Aspidoalbine* 2 —OCH₃ groups (as in *obscurinervine*)?

Fig. 31 (p. 203) *Akuammicine* —COOCH₃, not COOH₃. *Compactinervine* and *lochneridine* should have each a 2,16 double bond? *Geissospermine* lacks =CH.CH₃ at lower left?



Toxiferine-I I am unsure of this formula

- Fig. 33 (p. 209) *Ajmaline* Move top —OH one place to left?
- Fig. 35 (p. 215) *Alstonine* Is my formula correct? I have another
- Fig. 49 (p. 238) *Nor-laudanosine* Should this have $4 \times \text{—OCH}_3$ rather than $4 \times \text{—OH}$?
- Fig. 51 (p. 244) *Crotonosine* —OH , not —O , at top left
- Fig. 56 (p. 263) *Reticuline* The lower —OCH_3 group on the top ring should be —OH ? *Metaphanine* Add —CH_3 to N
- Fig. 70 (p. 294) *8-Phenyl-lobilol* —CH_3 , not —H on N
- Fig. 77 (p. 315) *Supimidine* Should have double bond on right of right-hand ring? *Thelepogine* One source has $3 \times \text{—CH}_3$ extra to my formula!
- Fig. 82 (p. 336) *Nupharamine* —CH_3 at top of ring (as in *nupharidine*)
- Fig. 83 (p. 350) *Holarrhimine* Move $\text{—CH}_2\text{OH}$ one place to right?
- Fig. 84 (p. 354) $(\text{—})\text{—Cocaine}$ Chain should be —CO.OCH_3
- Fig. 86 (p. 359) *Allantoin* Add —H to N
- Fig. 96 (p. 449) *3,4-Furocoumarin* Transpose 3 and 4 in diagram
- Fig. 97 (p. 451) *Imperatorin* Chain should be $\text{—O.CH}_2\text{.CH=C(CH}_3)_2$
- Fig. 98 (p. 453) *Archangelin, columbianadin*
- Fig. 99 (p. 455) *Allo-xanthoxyletin* Top ring should be



- Fig. 101 (p. 458) *Ellagic acid* =O , not =OH , at lower right. Add $\text{—3,3',4-trimethyl ether}$ to Flavellagic acid.
- Fig. 105 (p. 474) *Chalcone* Add =O to CH_2
- Fig. 112 (p. 543) *Petunidin* —OCH_3 , not OCH , at top. *Rosinidin* —OCH_3 at position 7
- Fig. 114 (p. 548) *Hinokiflavone* Should the link be to position 6?
- Fig. 115 (p. 555) *Olivin* Are there two substances of this name? I find a formula quite different from mine
- Fig. 118 (p. 558) *Guibourtacacidin* Add —OH at 4'
- Fig. 122 (p. 580) *Cycloartocarpin* Add —OH at top right (as in *dinatin*)

Fig. 124 (p. 606) *Karanjin* Left-hand ring should be



Fig. 127 (p. 611) *Homopterocarpin* Add $-\text{OCH}_3$ at 4'

Fig. 128 (p. 616) *Isisolone* Delete $-\text{OCH}_3$? *Maxima-substance-A* Chain at top left should be $-\text{OCH}_2\cdot\text{CH}=\text{C}(\text{CH}_3)_2$. *Osajin* Add $=\text{O}$ (as in other formulae)

Fig. 130 (p. 622) *Euparin* Add $=\text{O}$ at 6

Fig. 139 (p. 668) *Flavesone* I find formulae differing from mine

Fig. 140 (p. 670) *Calythron* Add $=\text{O}$ at 3?

Fig. 142 (p. 677) *Arctigenin* $-\text{OH}$, not $-\text{OCH}_3$ at lower left. *Lyonia-xyloside* Add $-\text{OCH}_3$ next to $-\text{OH}$ at left

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