**ADDENDA**

Prepared to accompany the digitalised version of the PhD thesis:

**A TAXONOMIC STUDY OF COMPOSITAE WITH SPECIAL REFERENCE TO SENECIO**

**By**

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**the University of Southampton**

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**ADDENDA CONTENTS**

1. **CORRIGENDA**

A corrigenda slip was originally pasted to one of the endpapers at the back of the 5 original copies of the thesis. The list of corrections was hurriedly prepared before submitting copies to the University of Southampton in 1966. I confess there were even several errors in the list and the list was also incomplete. This revised corrigenda, I hope, lists all the errors both in the main text, in the five diagrams and the appendices. If a reader should discover further errors, please let the author know.

1. **PAPERS CITING THE THESIS OF D G DRURY (1966)**

The 1966 thesis by D.G. Drury was never published. The findings of his research were prepared for publication as a paper entitled “*Senecio, a ragbag of Compositae*” for the Journal of the Linnean Society, London in 1966, but because of work commitments of the junior author following his emigration to New Zealand, the necessary revision of the manuscript required by the Editor was never completed. Nevertheless, for over 50 years systematic botanists and taxonomists have continued to make reference to the contents of this thesis. The following is a list of articles that have cited ‘the “*Taxonomic Study of Compositae with special reference to Senecio*”. This list may not be complete.

1. **VOUCHER SPECIMENS**

To undertake a morpho-anatomical survey of the plant family Compositae (Asteraceae) and to include as many of the 2000 species of the genus *Senecio* as practicable required access to plant material from around the globe. To obtain fresh material on such a scale would be an enormous, expensive and a time-consuming task. Using herbarium specimens was the most practical alternative. In 1963 the Botany Department of the University of Southampton possessed a herbarium of the British flora housed in a tall narrow cupboard at the back of the lecture theatre. Obviously, I needed to seek loans of more dried specimens from herbaria with world-wide collections. To obtain a cosmopolitan sample of Compositae, especially of Senecios, my supervisor Mr Leslie Watson approached a contact at the Kew Herbarium, Mr Airy Shaw, for help, but our request was declined. Leslie Watson then turned to Max Walters at the Botany School, Cambridge and later to his own university, Manchester, as well as to the Oxford Department of Botany and the Oxford Forestry School. All four sources welcomed us with loans without reservation. The bulk of the herbarium specimens came from Cambridge and Manchester. Their specimens had been collected mainly from different parts of the globe in the 19th century. Specimens from the herbaria at Oxford were generally more recent.

 Regrettably, I made no initial attempt to data-base the label information from each specimen I examined. The amount of material seemed to a first year PhD researcher overwhelming and I simply got on enthusiastically with the task of examining as many *Senecio* species as possible with a small selection of other Compositae for comparison purposes. After two years of microscopic study, I was ready to submit my data matrix of 369 species to a computer analysis on the CSIRO Computer, Australia. There was no computer in the UK to our knowledge large enough to process my huge data matrix. Once I had analysed the resulting hierarchy of groupings, I set about writing up my thesis for 9 months during 1966 my final research year. During this time I was applying for a university position as a taxonomist, first in the United Kingdom and later to overseas advertised positions. It was during my final year that Leslie Watson and I prepared a paper for the Journal of the Linnean Society, London based on my PhD research results entitled ‘Senecio, A Ragbag of Compositae’. I also needed to sort out the numerous specimens ready to be returned to their respective herbaria. All this activity left me with little time to finally create a data-base of all 369 specimens I had used in the computer analysis. I have since regretted this serious omission.

 To make amends, in 2003 on a trip to the United Kingdom with my daughter, I visited the herbaria at Manchester University and Cambridge Botany School. At Cambridge I was able to thank an aged Dr Max Walters personally for his generosity in loaning herbarium material to me. At MANCH and CBG with my limited time available, I identified and recorded many of the herbarium specimens I had used during 1964-1966. Unfortunately, because of the number of specimens involved, MANCH and CBG had only the recorded the number of sheet of specimens I had borrowed. The actual species borrowed were never recorded. I also wrote to FOX and OXF requesting information about my loans of specimens. The Oxford curators kindly provided me with a copy of their records.

 The list that follows shows that I managed to recover label information for 162 of the 369 specimens (i.e. 44%) that I examined in detail. The missing specimen numbers are also included. The list also contains a few instances where specimens of the same species were borrowed from different herbaria. I made no attempt to determine which of these I actually worked on; therefore, I have recorded all the specimens for that species. Some Cambridge specimens are listed without labels data. These, although never found on my 2003 visit, were actually used as vouchers in our 1966 paper ‘*Anatomy and the taxonomic significance of gross vegetative morphology in Senecio*’. *New Phytol. 64*: 307-314.

 I trust that this list of voucher specimens, although sadly incomplete,will nevertheless prove useful to future researchers.

1. **A MASTER INDEX TO BINOMIALS USED IN THE CLASSIFICATION & DIAGRAMS**

The Index has 7 labelled columns:

***Column 1***: names each genus in alphabetical order, together with the species number used in the investigation.

***Column 2***: The herbarium from which the species was loaned, when known.

***Column 3***: The binomials of the species examined, together with its

 author (abbreviated).

***Column 4***: The location of the species in each of the 5 dendrograms

 (Diagrams 1-5) given in the text.

***Column 5***: The location of each species in the proposed classification as Group, Subgroup and Division.

***Column 6***: The ‘nearest neighbour’ for each species studied given by the computer analysis.

***Column 7***: The centroid value at which each species joined with its ‘nearest neighbour’.

It should be noted that Diagrams 1-5 (i.e. the dendrograms) were prepared to show only the major groupings exposed by the computer analysis. For instance, in Diagram 1, fusions above 732 [showing the relationships of *Senecio barba-johannis* (167), *S. sandemanii* (163), *Liabum rusbyi* (149) and *Gamolepis euryopoides* (281)] are not displayed. Similarly in Diagram 2, the species fusing to give groupings 687, 670, 686, 679 582 and 650 are also omitted. This master index does ***not*** list all pages where each particular species is mentioned.

It is hoped that this index will aid the reader wishing to discover the exact relationship of any species (i.e. specimen) examined as determined by the computer analysis.