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SHORT COMMUNICATIONS

THE ALKALOIDS OF *ARALIOPSIS SOYAUXII (syn. ARALIOPSIS TABOUENSIS)* THE PAPER OF NGADJUI et al.

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In a recent paper published in the **Bulletin**, Ngadjui et al. (1) reported the isolation of a range of 2-quinolone and 4-quinolone monomers and dimers from a species of the genus *Araliopsis* Engl. (Rutaceae) originating in Cameroon. In the course of this paper the authors make assertions attributed to me as personal communications and to a paper (2) concerning Ghanaian material of *Araliopsis* on which I was co-author. Unfortunately some of these assertions are incorrect.

First, with reference to the species studied. The true situation regarding *Araliopsis* is that where *A. soyauxii* Engl. (1896) and *A. tabouensis* Aubrev. et Pellegr. (1936) are considered to be conspecific then the correct name to use is *A. soyauxii*. The more recent name, *A. tabouensis*, was coined for *Flore Côte D'Ivoire* and later used in a wider context in the second edition of the *Flora of West Tropical Africa*. The older name, *A. soyauxii*, was originally used by Engler to describe material from central Africa. The authors are correct in stating that I consider that they are conspecific (3) but incorrect in stating (p. 25) that we had previously studied material that we named as *A. soyauxii*. In both our original papers (2,4) we worked on Ghanain material and clearly employed the segregate name *A. tabouensis* and only when we became convinced that it was conspecific with *A. soyauxii* (3) did we turn to the latter name. The authors appear to have become confused by this problem in nomenclature and in their paper (1) mistakenly seem to attribute priority to the name *A. tabouensis*. Whether the two taxa are conspecific or not I doubt whether their material can be called *A. tabouensis* - Cameroonian populations would seem likely to be referable to *A. soyauxii* whichever interpretation is accepted.

Secondly the authors draw attention to our failure in earlier work (2-4) to isolate the dimeric quinolone alkaloids from Ghanaian material of *Araliopsis* and suggested that it may have been due to the small amount of bark (1 kg) used or to our misidentifying them as the idolopyridoquinazoline alkaloids evodiamine and rhetsinine, which they could not find in their study. The arguments used by the authors in relation to any misidentification cannot be sustained for the following reasons.

a) They have misinterpreted statements made in our paper concerning the procedure for the isolation of the idolopyridoquinazoline alkaloids. We refer to re-examination of the original chloroform extract which they have assumed to be the extract after treatment with 1M HCl. This was not so - the original extract was an aliquot that had not previously been treated in any way. I accept the ambiguity in the original statement in (2) but it is regretable that the authors never thought to establish this with the writers of the orignal paper.

b) The authors suggest that our mass spectral data could be attributed to a mixture of dimeric quinolones and acridones. This cannot be. The mass spectra in question were obtained at high resolution and higher m/z fragments for evodiamine clearly solve for 3 x N. Ions with 3 x N could not occur for either dimers (maximum 2 x N) or acridones (1 x N).

c) In all cases where these dimeric quinolone alkaloids have been isolated they are invariably accompanied by very large amounts of the corresponding monomeric pyranoquinolone (in the case of *A. soyauxii* (1) this is veprisine

- of which 4 g was isolated). These monomers are among the easiest alkaloids to isolate and our failure to obtain veprisine from the Ghanaian material we investigated seems to preclude the possibility of dimers being present.

It would appear to me that the authors of this paper are trying to explain what are really quite acceptable differences in the metabolism of anthranilic acid into alkaloids in different populations of *A. soyauxii*. It should be pointed out that during our earlier work (3) we reported comparable differences between Ghanaian and Nigerian population of another rutaceous species, *Oricia suaveolens* (Engl.) Verdoorn. While the latter was a rich source of the pyranoquinolone oricine the former had no oricine but produced instead the furoquinoline alkaloids flindersiamine and halfordinine.

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