the width of slot-like pores.) As before, in the case of the simple model of *Steele & Halsey*, the comparison of the more elaborate models shows that slot-like pores give better results. This suggests again, but on the basis of theoretical models, that the smaller set of micropores can be regarded as fissures between graphitic layers, as suggested earlier by *Wolff* [12]. Such fissures could arise from the stacking of the microcrystallites of the active carbon.

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239. Configuration of Pilocarpus Alkaloids

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(9. X. 74)

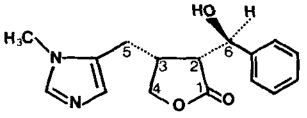
Summary. The validity of stereoformula **1**, **2** and **3** for (+)-pilosine and related alkaloids is discussed.

In a recent publication [1], *Tedeschi et al.* question the correctness of stereoformulae **1**, **2** and **3** as reported by us in 1972 [2] [3] for (+)-pilosine, (+)-isopilosine, and (–)-epiisopilosine respectively. On the basis of circular dichroism data the authors propose structures which are epimeric at C(6).

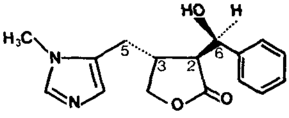
As to the relative configurations, our deductions [2] are based on an X-ray analysis of (+)-isopilosine the result of which cannot be doubted [3]. The absolute configurations ensue from the transformation of (+)-isopilosine (**2**) into (+)-pilocarpine (**5**) *via* (+)-pilosinine (**4**). The absolute configuration of **5** has been determined independently by two groups [4] [5].

Discussing the CD. spectra of the alkaloids, *Tedeschi et al.* [1] suppose that for aromatic amino acids 'the sign at the low-wavelength phenyl transition (^1L_a) around

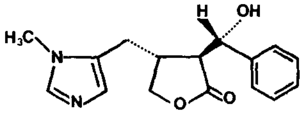
220 mμ is positive for compounds with (*S*)-configuration'. Extending this 'rule'[1]) to alkaloids **1** and **2** 'which exhibit positive dichroic bands in the low wavelength region' the authors suggest the 6(*S*)-configuration for these alkaloids and the 6(*R*) configuration for (–)-epiisopilosine (**3**). We doubt very much whether C(6) of the alkaloids is truly comparable to C(2) of aromatic amino acids, *e.g.* 2-phenylglycine or phenylalanine, in regard to circular dichroism. Moreover, (*S*)-2-phenylglycine (**6**) and (*S*)-phenylalanine (**7**) correlate not with 6-(*S*)- but with 6-(*R*)-pilosine type alkaloids (*Scheme*).



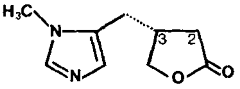
1 (+)-Pilosine
2R,3R,6R



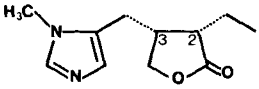
2 (+)-Isopilosine
2S,3R,6R



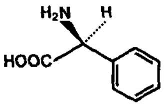
3 (–)-Epiisopilosine
2S,3R,6S



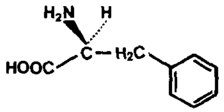
4 (+)-Pilosinine
3R



5 (+)-Pilocarpine
2S,3R



6 S-2-Phenylglycine



7 S-Phenylalanine

Conclusion: The previously published [2] structures of (+)-pilosine (**1**), (+)-isopilosine (**2**), and (–)-epiisopilosine (**3**) as defined below once more by formulae and nomenclature are correct.

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[1]) This generalisation is to be applied with caution even in the series of aromatic amino acids, *cf.* [6].