

reported to have a higher carbon content, 66.6 per cent. as against 61.3 and 54.3 per cent. obtained for A and B respectively. The major bitter component nimbidin, however, is said to contain probably sulphur also and thus differs from substances A and B, though it is also amorphous. In the earlier work of Murti *et al.* it was stated that though the crude bitter solid contained sulphur, it disappeared in the course of purification and hence they felt that the sulphur-containing impurity was very small in amount.

It may perhaps be right to conclude that the bitter principles of neem oil are of complex nature and not unlike the active components of such well-known bitters as quassia and gentian.

S. RANGASWAMI.

Andhra University,
Located at Guntur,
August 5, 1942.

¹ Siddiqui, *Curr. Sci.*, 1942, **11**, 278.

² Murti, Rangaswami and Seshadri, *Ind. Jour. Phar.*, 1940, **2**, 206.

OMISSION of the reference is regretted. It was due to the fact that the paper in question was published in a recently started *Journal of Pharmacy* and came to my notice only through the chemical abstracts¹ after the publication of the note on the bitter principles of Neem oil. Due reference would have been made to the work in the detailed communication on the subject.

Extraction of Neem oil with alcohol and isolation of water insoluble, neutral and acid

bitters from the alcoholic extract, with the help of dilute alcohol and other solvents, has been already referred to by Dymock.² The results obtained there or now by Seshadri *et al.* show the limitations of this mild method. The success of the procedure employed in the isolation of Nimbin and other products communicated in the note in *Current Science*³ is demonstrated by the uniformity of the isolated products and their yields. The details of this process will be dealt with in a subsequent communication.

With regard to the substances A and B obtained by Seshadri *et al.*, it will be noted that they are amorphous powders which decompose at 115 and 110-115° respectively. B, moreover, melts at 72°, prior to decomposition at 110-115°. Nimbin and Nimbinin, which are definite crystalline substances melting at 205° and 192° respectively, cannot, therefore, be confused with either of them. As far comments on Nimbidine or on the relationship between the active components of Nim and gentian or other bitters, it will be more appropriate to discuss them at a later stage of the investigations, which are now in progress.

S. SIDDIQUI.

Laboratories of the Director,
Scientific and Industrial Research,
University Buildings,
Delhi,
September 19, 1942.

¹ *Ame. Chem. Soc. Abst.*, May 1942, p. 2685.

² *Pharmacographia India*, 1890, **1**, 327.

³ *Curr. Sci.*, 1942, **11**, 278.