

While studying the effect of moisture level in onion powder on its colour, little difference was noticeable in the colour of samples up to 8.39% moisture (the critical point). Visible changes in colour were noticeable only after 15% moisture level, but they were still much less marked than those in the corresponding samples of garlic powder.<sup>4</sup> Further, greater browning was noticed during the storage of onion powder containing higher moisture content. It is, therefore, essential to reduce the moisture in onion powder to 4% or less wherein the colour and flavour changes were minimum.

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#### ON TWO PALM FRUITS FROM THE DECCAN INTERTRAPPEAN BEDS OF MOHGAON KALAN

So far only a few palm fruits are known from the Tertiary formations of India. These are *Palmocarpon (Iriartites) takliensis* (Sahni, 1934), *P. bracteatum* (Sahni, 1934), *P. compressum* (Sahni and Rode, 1937), *P. insigne* (Mahabale, 1950), *P. mohgaense* (Prakash, 1954), *Tricocites trigonum* (Sahni and Rode, 1937; Chitale, 1956) and *Nipa hindi* (Sahni and Rode, 1937), all from the Deccan Intertrappean Series. Apart from this Kaul (1951) reported *Cocos sahnii* from Kapurdi, Rajasthan desert and Lakhnapal (1952) described *Nipa sahnii* from Garo Hills, Assam.

Recently two new palm fruits were collected by the author from Mohgaon Kalan, the well-known locality of the Deccan Intertrappean series of Madhya Pradesh. These are being reported in the present note.

One of them is a drupe of medium size, about 7.2 cm. long, 3.2 cm. broad and 3.1 cm. thick. It is more or less avate in shape with 4-6 longitudinal ridges (of which two are very prominent), on its surface (Figs. 2-4). The pericarp of the fruit is similar to that of a palm fruit. It is well developed both towards the apex and base of the fruit (Fig. 1) and made up of a thin epicarp, a semi-fibrous mesocarp and a hard endocarp. The epicarp is composed of thin-walled parenchymatous cells. The mesocarp

is formed of loose, thin-walled cells of ground tissue with fibrous and fibrovascular bundles. A thin fibrous band runs all round the fruit just below the epicarp. Beneath this fibrous band the fibrous and fibrovascular bundles are more closely aggregated and in some regions they are arranged in 4-6 series. The endocarp is hard and formed of thick-walled cells with fairly small lumen. There is a well-developed seed inside the fruit, which measures  $3.7 \times 2.6$  cm. (Figs. 1-3). However, an aborted carpel is also present towards the basal end on one side of the fruit (Figs. 3 and 4). Endosperm is tough and formed of thick-walled cells.



FIGS. 1-8. Figs. 1-4. *Patmocarpon indicum* sp. nov. Fig. 1. Median longitudinal section of the fruit showing a well-developed seed. Fig. 2. Cross-section of the fruit towards the epical end. Fig. 3. Cross-section of the fruit from the middle region showing a well-developed seed and an aborted carpel. Fig. 4. Another cross-section of the fruit from the basal end showing a well-developed seed and an aborted carpel. All natural size. Figs. 5-8. *Palmocarpon sulcatum* sp. nov. Fig. 5. Cross-section through the apical end of the fruit showing a well-developed seed. Fig. 6. Another cross-section towards the apical end of the fruit. Fig. 7. Cross-section towards the basal end of the fruit showing a grooved seed and two aborted carpels. Fig. 8. Cross-section towards the basal end of the fruit showing a grooved seed and three aborted carpels. All natural size.

The other palm fruit, which is also a drupe, is almost quadrangular throughout its length (Figs. 5-8) and measures about 5.75 cm. in length and 4.2 cm. in the broadest distal part. As a small piece towards the apical end of this specimen is not present, it is rather difficult to say anything about the presence or absence of an umbo. The pericarp is composed of a membranous epicarp, a semi-fibrous mesocarp and a hard endocarp. The mesocarp, which forms most of the pericarp, is composed of a tissue of