

tion with the normal diploid. But this was not the case with the present material. However, in the progeny of the tetraploid which showed non-disjunction of a quadrivalent, a diploid plant with  $2n = 20$  chromosomes was found.<sup>11</sup> Its meiotic studies revealed a quadrivalent at first metaphase giving unequivocal evidence for the origin of the diploid from the tetraploid. The 44-chromosome cell resulting from non-disjunction of a quadrivalent seems to have segregated into 20 and 24 chromosome groups again as a result of non-disjunction of a quadrivalent and the 20-chromosome euploid cell became functional in spite of one of its chromosomes being quadruple.

The centromere exercises control over pairing and delays it in its immediate neighbourhood. Colchicine which has a specific effect on the centromere destroys this control mechanism and allows the chromosomes to come together at any point, often in two or three places, at once leading to a scramble which results in an extraordinary amount of interlocking.<sup>1</sup> The presence of the quadrivalent in metaphase II in the present material may be due to this type of interlocking which has delayed separation.

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### A NEW FOSSILIFEROUS LOCALITY OF THE DECCAN INTERTRAPPEAN BEDS, IN CHHINDWARA DISTRICT, M.P.

THE earliest collections of fossil plants from Chhindwara District, M.P., were made by Hislop and Hunter (1854)<sup>1</sup> and Hislop (1861-69).<sup>2</sup> They collected numerous petrified plants from these sedimentary beds along with faunal remains. Mohgaon Kalan, a village in Chhindwara District (M.P.), where Deccan Intertrappean beds are exposed, was discovered by Prof. K. P. Rode.<sup>3</sup> This fossiliferous locality has since become classic and numerous contributions on the plants occurring there have been made.<sup>4-6</sup>

While collecting fossil plants from Mohgaon Kalan and adjoining areas, we came across a new, richly fossiliferous locality of the Deccan Intertrappean beds. This locality is about 2 miles east of Markahandi Railway Station ( $22^{\circ} 3'$ ;  $79^{\circ} 13'$ ).

The fossils occur scattered at the base of a small hillock. The fossiliferous cherts bear a striking resemblance with those occurring near Mohgaon Kalan. Stems, inflorescence axes, leaves, possibly fruit, invertebrates and other fragmentary remains have been collected. We also collected a few large palm stems. The fossil plants in general appear to be well preserved.

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