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**EMBRYOLOGICAL STUDIES IN PALMÆ
(A PRELIMINARY NOTE ON THE
MEGASPOROGENESIS IN ARECA
CATECHU LINN.)**

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ops Research
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THE review of literature on Palmæ given by Schnarf¹ and Schürhoff² reveals the paucity of work on the subject. There is considerable difference of opinion between different investigators about the mode of development. A re-investigation of several members of the family palmæ is taken up by the author and a preliminary note on the megasporogenesis of *Areca catechu* Linn. is presented here.

There is a single basal, erect ovule in each ovary. The archesporial cell cuts off 4 to 6 parietal cells and the megaspore-mother cell becomes deeply placed. The development of the embryo-sac conforms to the Normal-type. The embryo-sac enlarges in size and the surrounding nucellar cells become disorganised constituting nutrition. Consequently the embryo-sac shows very irregular contour. The synergids are about the same size as the egg. The antipodals are persistent and become aggressive. The surrounding nucellar cells are depleted of their cell contents and the antipodals might be haustorial in function. The nuclei of the antipodal cells show marked hypertrophy.

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Bangalore,
February 25, 1942.

¹ Schnarf, K., *Vergleichende Embryologie der Angiospermen*, Berlin, 1931.
² Schürhoff, P. N., *Die Zytologie der Blütenpflanzen*, Stuttgart, 1926.