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Nectariferous Plant Genetic Resources for Apicultural Entrepreneurship in Nigeria: Prerequisite for Conservation, Sustainable Management and Policy

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Abstract: The contemporary global economic meltdown has devastating effect on the Nigerian's economy and its frantic search for alternative source of national revenue aside from oil and gas has become imperative for economic emancipation for Nigerians. Apicultural entrepreneurship could provide a source of livelihood if the basic knowledge of those plant genetic resources needed by bees is made available. A palynological evaluation of those palynotaxa which honey bees forage for pollen and nectar was carried out after standard acetolysis method. Results showed that the honey samples were highly diversified and rich in honey plants. A total of 9544.3 honey pollen, consisting of 39 honey plants belonging to 21 plant families and distributed within 38 genera were identified excluding 238 unidentified pollen grains. Data from the analysis equally revealed that Elaeis guineensis Jacq, Anacardium occidentale L, Diospyros mespiliformis Hochist xe ADC, Alchornea cordifolia Muell, Arg, Daniella oliveri (Rolfe) Hutch & Dalz, Irvingia wombolu Okafor ex Baill, Treculia africana Decne, Nauclea latifolia Smith and Crossopteryx febrifuga Afzil ex Benth were the predominant honey plants. It provided a guide to the optimal utilization of floral resources by honeybees in these regions, showing the opportunity and amazing potentials for apiculture entrepreneurship of these palytaxa. Most of these plants are rare, threatened and endangered. It calls for urgent conservation techniques and step by all players. Critical awareness creation to ensure farmers knowledge of these palynotaxa to ensure proper understanding and attendance boost from them as economic empowerment is needed.

Keywords: palynotaxa, acetolysis, enterprise, livelihood, Nigeria

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