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| **refs itemname** | Book Section |
| **Bibliography** | Ehara, H. (2018) Genetic variation and agronomic features of Metroxylon palms in Asia and Pacific, In: Sago Palm: Multiple Contributions to Food Security and Sustainable Livelihoods, eds H. Ehara, Y. Toyoda and D.V. Johnson, 45-59, Springer Nature, Singapore, URL: https://doi.org/10.1007/978-981-10-5269-9\_4 |
| **Associated conference** |  |
| **Abstract / Content summary** | Fourteen genera among three subfamilies in the Arecaceae family are known to produce starch in the trunk. The genus Metroxylon is the most productive among them and is classified into section Metroxylon including only one species, M. sagu (sago palm: called the true sago palm), distributed in Southeast Asia and Melanesia and section Coelococcus consisting of M. amicarum in Micronesia, M. salomonense and M. vitiense in Melanesia, M. warburgii in Melanesia and Polynesia, and M. paulcoxii in Polynesia. In sago palm, a relationship between the genetic distance and geographical distribution of populations was found as the result of a random amplified polymorphic DNA analysis. A smaller genetic variation of sago palm in the western part than in the eastern part of the Malay Archipelago was also found, which indicated that the more genetically varied populations are distributed in the eastern area and are possibly divided into four broad groups. Metroxylon warburgii has a smaller trunk than sago palm, but the trunk length of M. salomonense, M. vitiense, and M. amicarum is comparable to or longer than that of sago palm. Their leaves are important as building and houseware material, and the hard endosperm of M. amicarum and M. warburgii seeds is utilized as craftwork material. Preemergent young leaves around the growing point of M. vitiense are utilized as a vegetable. Regarding starch yield, palms in Coelococcus are all low in the dry matter and pith starch content as compared with sago palm. For this reason, M. salomonense and M. amicarum have low yield despite the large size of their trunk. Palms in Coelococcus are mostly regarded as emergency crops and had been utilized when major crops suffered climate damage. Today, roof thatching is the most common use of the leaves, and the domestication of M. warburgii is currently under way in Vanuatu and Samoa. |
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