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## Comparative Studies on Different Agroecosystem Base on Soil Physicochemical Properties to Development of Sago Palm on Dryland

Muhidin\*, Sitti Leomo, Syamsu Alam and Teguh Wijayanto

Department of Agrotechnology, Faculty of Agriculture, Universitas Halu Oleo Kendari 93232 Southeast Sulawesi Indonesia

**Abstract :** Sago palm (*Metroxylon sagu* Rottb) is a key staple food for residents in eastern Indonesia and the second staple food after rice so that it becomes favorite local food. Development and utilization of sago is very strategic to support and ensure the food security in Indonesia. The development of sago in Indonesia faces serious problems due to the narrowing areas of sago planting and declining of its production potency. Development of sago palm should be directed to be conducted on dry land. Although the dry land is not the native habitat of sago palm, but it is abundant compared to the limited wetland. Therefore, it is necessary to characterize the effect of different environmental conditions on sago planting, mainly concerning the relation of soil physical and chemical properties to the growth, production potential, and quality of produced sago starch. The research results showed that (1) sago plant has a better growth on wetland than on dry land, (2) despite the dry land is less suitable for the cultivation of sago, but if nutrients required by sago plants are available, then the sago plants can be grown on dry land, (3) Therefore, to obtain high growth and production on dry land, the addition of organic matter is needed.

**Key words**: Sago, Starch, Dry land, Wetlands, Staple food.

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