

PENENTUAN UMUR STALAGMIT PROVINSI GORONTALO SEBAGAI PROXY DATA PALEOKLIMAT

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ABSTRACT: Climate and weather area more varied and diverged, in which it impacts Indonesia significantly. Some people worry about this situation, especially they who are from agricultural, plantation, forestry, naval, and transportation areas. It becomes a consideration for the government to increase community economic activity, involving Province of Gorontalo. Moreover, Province of Gorontalo planned for Agropolitan in order to develop community economic system, so that, a preventive attempt need to find to cope climate impact. It can be conducted by providing sufficient data about past chronological climate. This data may give information about climate cycle and climate pattern that may appear in tropical area, especially in Province of Gorontalo. This research, however, is still limited to the determination of stalagmite sample age, in which it uses radiocarbon method. This method shows stalagmite sample from Province of Gorontalo has age shift of: Regency of Gorontalo 1 has 3410 ± 130 BP age; Regency of Gorontalo 2 has 1960 ± 130 BP; regency of Boalemo has 1830 ± 130 BP; and regency of Pohuwato has 3190 ± 130 BP. Stalagmit sample in the province of Gorontalo can be used to add and elongate data for paleoklimat analysis. Rapid rate of precipitation for respective sample are regency of Gorontalo 1: 0.17 mm/th, sample from regency of Gorontalo 2: 0.25 mm/th, sample from regency of Boalemo mm/th, and sample from regency of Pohuwato: 0.19 mm/th. Thus, stalagmite sample from Gorontalo can add time period to determine paleoklimat chronology pattern.

Key words: stalagmite, Paleoklimat, Radiocarbon method, Climate.