

**EKSPLORASI BAHAN-BAHAN ALAM YANG DIGUNAKAN DALAM
KEHIDUPAN SEHARI-HARI MASYARAKAT DESA WEE RAME DAN
INTEGRASINYA KE DALAM PEMBELAJARAN KIMIA SMA**

Oleh

Apliana Priskila Mone, NIM 1713031017

Program Studi Pendidikan Kimia, Jurusan Kimia

ABSTRAK

Penelitian ini bertujuan mendeskripsikan dan menjelaskan bahan-bahan alam dan kandungan kimianya yang digunakan dalam kehidupan sehari-hari masyarakat Desa Wee Rame, Nusa Tenggara Timur serta potensinya untuk diintegrasikan ke dalam pembelajaran kimia SMA. Penelitian ini bersifat deskriptif eksploratif. Subjek penelitiannya adalah bahan-bahan alam yang digunakan dalam kehidupan sehari-hari masyarakat Desa Wee Rame. Metode pengumpulan data yang digunakan adalah metode observasi, wawancara, dan studi literatur. Hasil penelitian menunjukkan terdapat 67 bahan-bahan alam yang digunakan dalam kehidupan sehari-hari masyarakat desa Wee Rame, yang mencakup 2 jenis bahan mineral dan 65 jenis bahan organik. Bahan-bahan tersebut digunakan untuk keperluan sandang, pangan, papan, kesehatan, kosmetik, dan adat/sosial budaya. Bahan-bahan mineral yang digunakan meliputi batu kapur dan tanah liat. Bahan-bahan tersebut mengandung kalsium karbonat dan leburan silika dan alumunium. Sedangkan, bahan-bahan organik yang digunakan meliputi kapas, saeh, padi, jagung, singkong, talas, ubi jalar, kopi robusta, bawang merah, bawang putih, jeruk nipis, tomat, jeruk purut, jahe, kemangi, salam, lengkuas, kayu manis, kemiri, kencur kunyit, daun pandan, serai, cabai rawit, labu siam, kelapa, pisang, pepaya, sirsak, mangga, alpukat, nangka, bayam duri, terong, metimun, kelor, jati, mahoni, bambu, kesambi, binahong, kumis kucing, alang-alang, gandarusa, ketepeng cina, jarak, balakacida, cengkeh, asam jawa, johar, jambu biji, nitas, beluntas, gulma bandotan, mahkota dewa, mimba, bligo, daun afrika, waru, sukun, lidah buaya, kembang sepatu, pacar air, sirih, dan pinang. Bagian bahan organik yang digunakan masyarakat Desa Wee Rame meliputi bagian akar, batang, kulit batang, daun, umbi atau rimpang, buah, dan biji. Kandungan kimia bahan-bahan alam tersebut meliputi flavonoid, saponin, alkaloid tanin, terpenoid, vitamin, fenolik, steroid, glikosida, dan minyak atsiri. Bahan-bahan alam dapat diintegrasikan ke dalam materi pembelajaran kimia SMA, misalnya pada materi peran kimia dalam kehidupan, ikatan kimia, larutan elektrolit dan nonelektrolit, senyawa hidrokarbon, indikator asam basa, sistem koloid, dan polimer.

Kata kunci: bahan alam, desa Wee Rame, pembelajaran kimia

EXPLORATION OF NATURAL MATERIAL USED IN DAILY LIFE OF THE WEE RAME VILLAGE COMMUNITY AND ITS INTEGRATION INTO CHEMICAL LEARNING HIGH SCHOOL

By

Apliana Priskila Mone, NIM 1713031017

Chemistry Education Study Program, Departement of Chemistry

ABSTRACT

This study aims to describe and explain the natural materials and chemical content used in the daily life of the people of Wee Rame village, East Nusa Tenggara and their potential for integrated into high school chemistry learning. This research is descriptive exploratory in nature. The research subjects are natural materials used in the daily life of the Wee Rame village community. Data collection methods used are observation, interviews, and literature studies. The results showed were 67 natural materials used in the daily life of the Wee Rame village community, which included 2 types mineral and 65 types material organik. These material is used for the purpose clothing, food, shelter, health, cosmetic, and customary/social cultural. Mineral materials used covers limestone and clay. These materials contain calcium carbonate and fused silica and aluminum. Organic ingredients used covers cotton, saeh, paddy, corn, cassava, taro, sweet, potato, robusta coffe, shallots, garlic, lime, tomatoes, kaffir lime, ginger, basil, bay, galangal, cinnamon, candlenut, kencur, pandan leaves, lemongrass, cayenne pepper, chayote, coconut, banana, papaya, soursop, mango, avocado, jackfruit, spinach, eggplant, cucumber, moringa, teak, mahogany, bamboo, kesambi, binahong, cats, reeds, gandarusa, chinese ketepeng, distance, balakacida, cloves, tamarind, johar, guava, nitas, beluntas, bandotan weed, crown of god, neem, bligo, african leaves, waru, breadfruit, aloe vera, hibiscus, water henna, betel, and areca nut. The part organic materials used by the Wee Rame Village community covers roots, stem, stems bark, leaves, tubers or rhizomes, fruit, and needs. These natural ingredients chemical contents of these covers flavonoids, saponins, tannin alkaloids, terpenoids, vitamins, phenolics, steroids, glycosides, and essential oils. Natural ingredients can be integrated into high school chemistry learning, for example in materials about the role of chemistry in life, chemical bonds, electrolyte and non electrolyte solutions, hydrocarbon compounds, acid-base indicators, colloid systems about the types of colloids, and polymers.

Keywords: natural materials, Wee Rame village, chemistry lesson.

DAFTAR ISI