

alpinia x microbe

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Malaysia's wealth of biodiversity is a natural laboratory which has been experimenting for 130 million years. One of the many antidotes that this laboratory has provided us is the plant *Alpinia conchigera* (Zingiberaceae) locally known as lengkuas padi, lengkuas ranting, or lengkuas chengkenam. It has been traditionally used for dysentery and skin infection caused by fungi (rhizome); as a poultice after confinement and to treat rheumatism (leaf).

In view of the prevailing knowledge, we tested the essential oil from the rhizome and leaf of *A. conchigera* against selected microbes. The rhizome oil was moderately sensitive against the Gram positive *Bacillus subtilis* and *Candida albicans*, whilst the leaf oil was moderately sensitive towards *B. subtilis*. The rhizome oil is rich in oxygenated monoterpenes where the hydroxyl group possessed higher antimicrobial activity compared to hydrocarbon terpenes which were the major constituents of leaf oil (Hyldgaard et al., 2012).

Based on this scientific validation of the efficacy of lengkuas padi, a convenient method was developed to incorporate the antimicrobial property of this plant in our soap, shower gel and handwash. The products provide a natural way to guard against bacteria and fungi in our daily lives. More importantly the link to our past and heritage is preserved albeit in a modern setting. As we become more urbanized, the responsibility to continue our traditions become ever more desperate, in order to safeguard our knowledge among the younger generations.

