

Abstract for the BioAsie Program Meeting
'Extraction, characterization and optimization of bio-molecules from by-products of the Asian timber'
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Université de Lorraine, Nancy, France

Bio-activities of extractives from tropical hardwoods

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Wasrin Syafii and Rita Kartika Sari

Department of Forest Products
Faculty of Forestry
Bogor Agricultural University
Indonesia

Society needs to find renewable alternatives to fossil resources in the coming decades. One of the ways is to convert biomass resources to produce chemicals, especially extractives for preservatives and pharmaceutical uses. Therefore a study on the exploration and identification of bio-active compounds from woods will be the most social demanded subject. The outline of presentation will be the antitermitic activities, antifungal activities, antimalarial activities, and antidiabetic activities of extractives from tropical hardwood. The wood samples used in this study were manggis wood (*Garcinia mangostana*), ulin wood (*Eusideroxylon zwageri*), bidara laut wood (*Strychnos ligustrina*), and red jabon wood (*Anthocephalus macrophyllus*). The wood samples were converted into woodmeals with 40-60 mesh screen, air-dried to about 15% moisture content. The woodmeals were then extracted with organic solvent to produce extract. The extract was then subjected to antitermic, antifungal, antimalarial, and antidiabetic bio-assay test. The result showed that mangis wood containing antitermitic compound namely 2-methyl ether 3', 4', 4', 6 tetrahydroxy benzophenone, ulin wood containing antifungal compound namely eusiderin, bidara laut wood containing antimalarial compound namely strychnis and brucin, and the red jabon wood containing antidiabetic compound namely quinic acid, catechol, and benzoic acid.

