## A159 Chemical and cytotoxiciy constituents from the stem of *Machilus zuihoensis*

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Recently, studies on Lauraceous plants from chemical interest have gradually brought into focus on cytotoxic constituents (1-5). *Machilus zuihoensis* Hayata (Lauraceae), an endemic species in Taiwan, is an evergreen medium-sized tree found widely throughout the Island from low lands up to 1500 m (6). Its bark is a incense material for joss-stick. Earlier investigation have obtained two alkaloids: *L*-(-)-*N*-norarmepavine and *dl*-*N*-norarmepavine from the stem (7), four neolignans from the bark of this plant (8). In this plant, only the stem wood showed significant cytotoxicity *via* high-throughput screening against NUGC and HONE-1 cancer cell lines *in vitro*. Examination of *n*-hexane soluble part of the stem wood has led to the isolation of five new compounds: machilactone (**1**), 3,4-dihydroxy-β-bisabolol (**2**), 3-hydroxy-2-(octadecylidene)-secobutanolide (**3**), and the mixture of machicolide A (**4**) and machicolide B (**5**). In this symposium, we report herein the isolation and characterization of **1-5** by spectral analyses and the cytotoxicity of the isolates.

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## A160 Quinoline alkaloids and anti-platelet aggregation constituents from the leaves of *Melicope seme - carpifolia*

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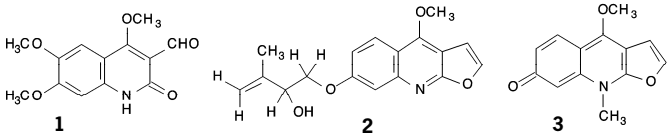
*Melicope semecarpifolia* (Merr.) T. Hartley (*Evodia merrillii* Kanehira & Sasaki ex Kanehira, *Melicope confusa* (Merr.) Liu) is a small-to-medium-sized evergreen trifoliated tree, distributed in Taiwan and Philippines (1). The leaves of this plant were rich in furoquinoline alkaloids, and among these alkaloids, only confusameline and evomerrine were isolated as new compounds at that time (2-5). The roots of this plant have been used as a carminative in folk medicine (6). Investigation of the anti-platelet aggregation constituents led to the isolation and characterization of three new alkaloids, melisemine (**1**), confusadine (**2**), and melicarpinone (**3**), together with twelve known compounds. In the previous studies, it was demonstrated that the major isolates skimmianine (5), confusameline (5), kokusaginine (5), and haplopine (7) at 100 μg $ml^{-1}$ possessed marked anti-platelet aggregation effects. In this study, it was found that among the minor isolates, only confusadine (**2**) at 50 and 100 μg $ml^{-1}$ showed marked inhibition of platelet aggregation induced by AA, collagen and PAF, and the other compounds all showhed no obvious activity. This could support that the anti-platelet activity of *M. semecarpifolia* leaves was due to the major isolates. This symposium described the structural elucidation of **1–3** and the anti-platelet aggregation activity of the minor isolates.

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