

インドネシア薬用植物 第XXI報 : *Erythrina*  
*variegata* 樹皮と *Maclura cochinchinensis*  
根から単離した  $\text{Na}^+/\text{H}^+$  交換阻害物質

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**Indonesian Medicinal Plants. XXI. Inhibitors of  $\text{Na}^+/\text{H}^+$   
Exchanger from the Bark of *Erythrina variegata* and the Roots  
of *Maclura cochinchinensis***

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**ABSTRACT** Through bioassay-guided separation of the methanol extracts of Indonesian medicinal plants, three inhibitors of the  $\text{Na}^+/\text{H}^+$  exchange system, erythrinin B, euchrenone  $\text{b}_{10}$ , and 1,3,5-trihydroxy-4-(3-methylbut-2-enyl)xanthen-9-one, were isolated from the bark of *Erythrina variegata* (Fabaceae) and the roots of *Maclura cochinchinensis* (Moraceae). These compounds significantly inhibited the  $\text{Na}^+/\text{H}^+$  exchange system of arterial smooth muscle cells, with minimum inhibitory concentrations of 1.25, 1.25, and 10  $\mu\text{g}/\text{ml}$ , respectively. Three new prenylated xanthenes named isocudraniaxanthenes B and A and isoalvaxanthenone were also isolated from *M. cochinchinensis* and the chemical structures were elucidated on the bases of their chemical and physicochemical properties.

抄録 インドネシアの薬用植物である *Erythrina variegata* 樹皮および *Maclura cochinchinensis* 根から erythrinin B, euchrenone  $\text{b}_{10}$ , 及び 1,3,5-trihydroxy-4-(3-methylbut-2-enyl)xanthen-9-one を単離し、それぞれに 1.25, 1.25, 10  $\mu\text{g}/\text{ml}$  の濃度で  $\text{Na}^+/\text{H}^+$  交換阻害活性があることを明らかにした。さらに、*M. cochinchinensis* 根から 3 種の新規プレニルキサントン、isocudraniaxanthenes B, A 及び isoalvaxanthenone

を単離し、それらの化学構造を化学的及び物理化学的手法を用いて明らかにした。

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