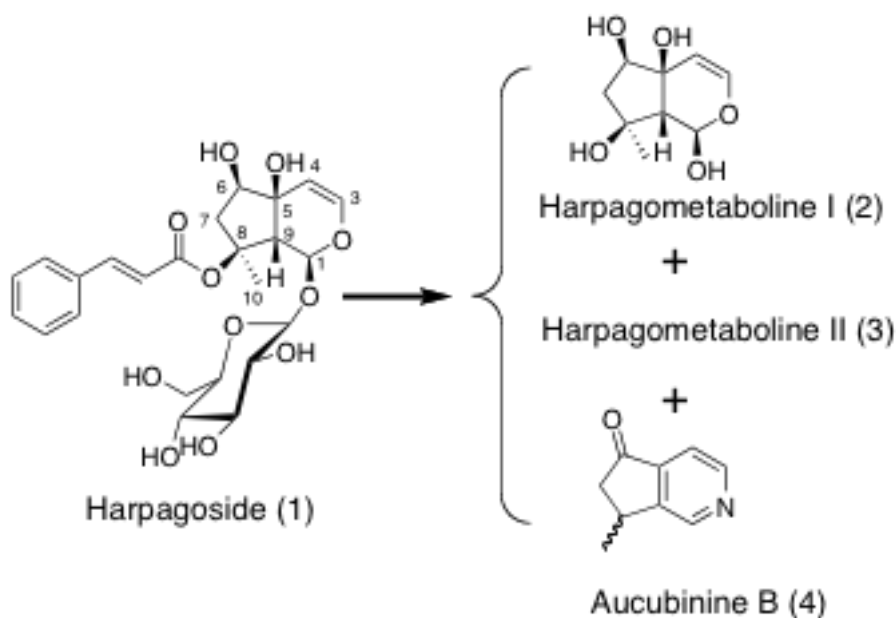


Harpogoside



Metabolic conversion of harpagoside by human intestinal bacteria

代謝実験

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単一化合物 harpagoside

Metabolite A (Harpagometabolin I)

Yellowish oil. IR $\nu_{\max}$: 3425, 1715, 1605 cm^{-1} . FABMS (positive): m/z 206 $[\text{M}+\text{Na}]^+$, 184 $[\text{M} + 1]^+$. HR-FAB-MS m/z 184.0989 $[\text{M} + 1]^+$ (calcd for $\text{C}_9\text{H}_{14}\text{NO}_3$ 184.0973). ^1H NMR: δ 5 1.54, 2.79 (each dd, $J=12.5, 18.9$ Hz and 7.3, 18.9 Hz), 8 5.30 (dd, $J=4.5, 7.3$ Hz), 2.84 (s), 8 1.25 (s), 8 8.74, 8.53, 8.45 (H-1, H-3, H-4). [Yang et al., *Chinese Chemical Letters*, **11**, 779-782 (2000)]

Metabolite B (Harpagometabolin II)

Yellowish oil. EI-MS: m/z 147 $[\text{M}]^+$, 132 $[\text{M}-\text{Me}]^+$, 118 $[\text{M}-\text{C}_2\text{H}_5]^+$, 104 $[\text{M}-\text{C}_3\text{H}_7]^+$, 91 $[\text{M}-\text{C}_3\text{H}_7-\text{N}]^+$. IR $\nu_{\max}$: 3435, 1725, 1660 cm^{-1} for the OH, C=N and C=C. HR-EI-MS m/z 147.0696 $[\text{M}]^+$ (calcd for $\text{C}_9\text{H}_9\text{NO}$ 147.0684). [Yang et al., *Chinese Chemical Letters*, **11**, 779-782 (2000)]

Letters, **11**, 779-782 (2000)]

Metabolite C (AucubinineB)

Yellowish oil. IR $\nu_{\max}$: 3420, 1725, 1600 cm^{-1} . EI-MS: m/z 147 $[\text{M}]^+$, 132 $[\text{M}-\text{Me}]^+$, 118 $[\text{M}-\text{C}_2\text{H}_5]^+$, 104 $[\text{MC}_3\text{H}_7]^+$, 91 $[\text{M}-\text{C}_3\text{H}_7-\text{N}]^+$. HREI-MS m/z 147.0699 $[\text{M}]^+$ (calcd for $\text{C}_9\text{H}_9\text{NO}$ 147.0684). [Yang et al., *Chinese Chemical Letters*, **11**, 779-782 (2000)]

参考文献

Yang X. W., Zou C. T., and Hattori M.: Harpagometabolins I and II, two new metabolites from harpagoside by human intestinal bacteria. *Chinese Chemical Letters*, **11**, 779-782 (2000).