

Briaexcavatins I–P, Eight New Briarane-related Diterpenoids from the Cultured Octocoral *Briareum excavatum*

Mei-Ru Lin¹, Ping-Jyun Sung^{2,3,4} and Jyh-Horng Sheu^{1,2*}

¹Department of Marine Biotechnology and Resources, National Sun Yat-sen University,
Kaohsiung 804, Taiwan

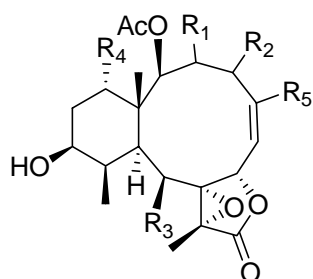
²Asia-Pacific Ocean Research Center, National Sun Yat-sen University,
Kaohsiung 804, Taiwan

³National Museum of Marine Biology and Aquarium, Checheng, Pingtung 944, Taiwan

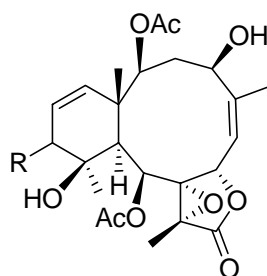
⁴Graduate Institute of Marine Biotechnology, National Dong Hwa University,
Checheng, Pingtung 944, Taiwan

Abstract

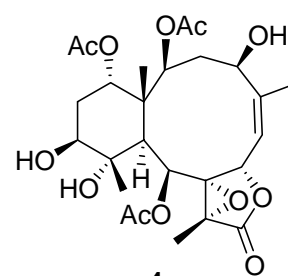
Eight new briarane-type diterpenoids, designated as briaexcavatins I–P (**1**–**8**), along with two known compounds, excavatolides C (**9**) and E (**10**), were isolated from the cultured octocoral *Briareum excavatum*. The structures of above compounds were determined by spectroscopic methods and the structures of **9** and **10** were further confirmed by X-ray data analysis for the first time. The absolute configuration of **10** was elucidated by chemical conversion. Some of these briaranes have displayed inhibitory effects on superoxide anion generation by human neutrophils.



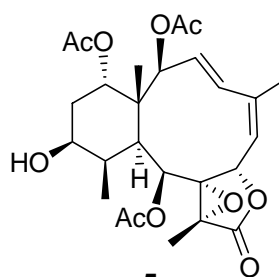
- 1:** R₁ = R₂ = H, R₃ = R₄ = OAc
R₅ = CH₃
2: R₁ = H, R₂ = β-OH, R₃ = R₄ = OAc
R₅ = CH₃
7: R₁ = β-OCO(CH₂)₂CH₃, R₂ = α-OAc
R₃ = OAc, R₄ = OH, R₅ = CH₃
8: R₁ = β-OH, R₂ = α-OAc,
R₃ = R₄ = OAc, R₅ = CH₃
9: R₁ = OAc, R₂ = H, R₃ = R₄ = OAc
R₅ = CH₃
10: R₁ = R₂ = H, R₃ = OH, R₄ = OAc
R₅ = CH₃



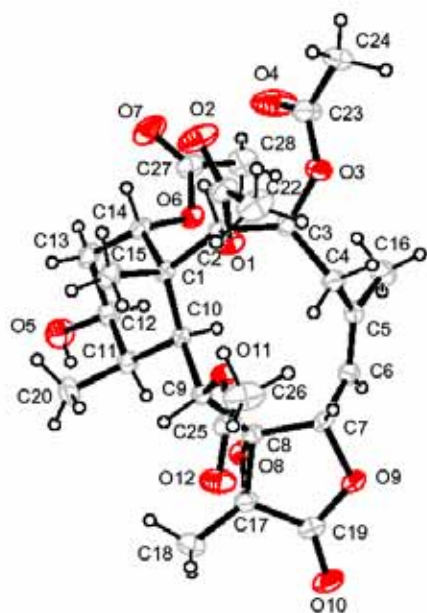
- 3:** R = α-OH
6: R = β-OAc



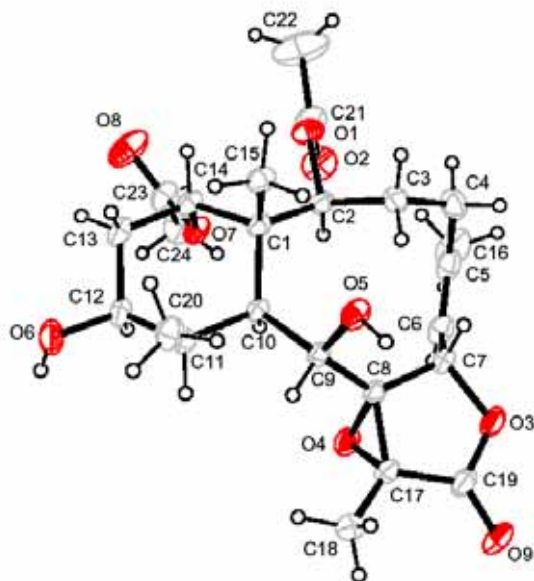
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References

- (1) New briaranes from the octocorals *Briareum excavatum* (Briareidae) and *Junceella fragilis* (Ellisellidae). Sung, P.-J.; Lin, M.-R.; Su, Y.-D.; Chiang, M. Y.; Hu, W.-P.; Su, J.-H.; Cheng, M.-C.; Hwang, T.-L.; Sheu, J.-H. *Tetrahedron* **2008**, *64*, 2596–2604.
- (2) Briaexcavatins M–P, Four New Briarane-related Diterpenoids from Cultured Octocoral *Briareum excavatum* (Briareidae). Sung, P.-J.; Lin, M.-R.; Hwang, T.-L.; Fan, T.-Y.; Su, W.-C.; Ho, C.-C.; Fang, L.-S.; Wang, W.-H. *Chem. Pharm. Bull.* **2008**, in press volume 56 number 7