New Coumarin from the Fruits of Cnidium monnieri

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Cnidium monnieri (L.) Cusson (Umbelliferae) is a crude drug "Fructus Cnidii" (Chinese name Shechaungzi) used in traditional Chinese to treat impotence, frigidity, and skin-related disease. Coumarins, chromones, and their derivatives were isolated from this plant in previous studies. Many of these compounds were found to exhibit insecticidal, antiallergic, antifungal, and antibacterial activities. Investigation on EtOAc-soluble fraction of the fruits of C. monnieri has led to the isolation of a new coumarin, enidimonnin (1), together with 7 known coumarins, including meranzin hydrate (2), peroxyauraptenol (3), auraptenol (4), bergapten (5), isopimpinellin (6), osthol (7), and xanthotoxin (8). The structure of new compound 1 was determined through spectroscopic and MS analyses. This symposium describes the structural elucidation of 1 and the biological activities of the isolates.