

[Heterocycles, 54, 139-150 (2001)]

[Lab. of Pharm. English]

**Synthesis and Properties of Novel Medium-Sized Heterocyclic Compounds Containing Two Sulfur Atoms in the Ring and Synthetic Approaches to Conjugated Cyclic Disulfonium Ylides.**

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A New dithiecin, tribenzo[*b,f,h*][1,4]dithiecin **1** was prepared by coupling 2,2'-bis(bromomethyl)biphenyl with 1,2-benzenedithiol in the presence of sodium hydride in acetonitrile. Another novel dithiecin derivative, 1,8-dihydro-2,7-benzodithiecin **2** was synthesized by coupling of 1,4-dimercapto-2,3-*O*-isopropylidene-Lg-threitol with  $\alpha,\alpha'$ -dibromo-*o*-xylene, followed by hydrolysis and subsequent dehydration *via* the mesylate derivative. The benzodithiecin **2** was also prepared by treatment of  $\alpha,\alpha'$ -mercapto-*o*-xylene with butadiyne along with  $\alpha,\alpha'$ -bis(1-buten-3-ynylthio)-*o*-xylene **3** as a byproduct. Compound **3** was subjected to an intramolecular coupling reaction using CuCl-pyridine-O<sub>2</sub> in benzene to yield the 12-membered ring compound. We also describe our effort to prepare the corresponding cyclic diylide compounds from the above new dithiecin **1** and **2** and known dithiecin.

[Planta Med., 67, 871-873 (2001)]

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**Erythrinan Alkaloids and Isoflavonoids from *Erythrina poeppigiana*.**

Hitoshi TANAKA, Hideo ETOH, Hiroshi SHIMIZU,\* Tomoko OH-UCHI, Yukimasa TERADA and Yoichi TATEISHI

A new erythrinan alkaloid, 8-oxo- $\alpha$ -erythroidine epoxide, was isolated from wood of *Erythrina poeppigiana* together with the five known compounds, 8-oxo- $\alpha$ -erythroidine, erystagallin C, alpinumisoflavone, erythrinin C and eryvarin A. Their structures were elucidated on the basis of spectroscopic evidence.

[Phytochemistry, 56, 769-773 (2001)]

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**Erysubins C-F, Four Isoflavonoids from *Erythrina suberosa* var. *glabrescences*.**Hitoshi TANAKA, Hideo ETOH, Naoharu WATANABE, Hiroshi SHIMIZU,\* Mansoor AHMAD  
and Ghazala Hafeez RIZWANI

Four isoflavonoids, erysubins C-F, together with ten known compounds were isolated from the roots of *Erythrina suberosa* var. *glabrescences*, and their structures were elucidated on the basis of spectroscopic evidence. Erysubin C is an unusual pterocarpan derivative with a formyl group.

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**Revised Structures for Senegalensin and Euchrenone b<sub>10</sub>.**Hitoshi TANAKA, Mitsunobu DOI, Hideo ETOH, Naoharu WATANABE, Hiroshi SHIMIZU,\* Miyuki HIRATA,  
Mansoor AHMAD, Imran QURASHI and Mohammad Rehan KHAN

Two prenylated isoflavones (**1** and **2**) with a hydroxyisopropylidihydrofuran moiety have been isolated from the wood of *Erythrina suberosa* var. *glabrescence*. The structure of compound **1** was in good agreement with that of the previously reported senegalensin, isolated from the stem bark of *Erythrina senegalensis*. The structure of senegalensin was revised from structure **2** to structure **1** by spectroscopic means. Compound **2**, the regioisomer of **1**, was confirmed as euchrenone b<sub>10</sub> by comparison with the spectral data of the reported euchrenone b<sub>10</sub>, isolated from the roots of *Euchresta horsfieldii*. The structure of **2** was established by 2D NMR spectroscopic analysis and by the X-ray crystallographic analysis of its *p*-bromobenzoyl derivative.