

COVER PICTURE

The cover picture shows *Euphorbia resinifera* Berg and its constituent resiniferatoxin (RTX), a phorboid that acts as an ultrapotent biological analogue of capsaicin, the hot principle of chili pepper and the archetypal vanilloid. Ever since its isolation, interest within the organic community for phorbol has been high on account of its challenging structure, puzzling reactivity, and remarkable bioactivity. Diacyl derivatives of phorbol can act as ultrapotent analogues of the endolipid sn-1,2-diacylglycerol (DAG) and show powerful tumour-promoting properties. The more recent discovery that certain non-tumour-promoting phorbol derivatives and phorbol-related compounds can activate vanilloid receptors of the TRPV1 and TRPV4 type has made phorbol very interesting also for neurosciences. The article by G. Appendino et al. on p. 3413 ff. describes the synthesis of hybrid phorbol-resiniferatoxin of interest for the study of vanilloid receptors, which discloses some new and unpredictable aspects of the chemistry of phorbol. (Photo courtesy by Prof. Mauro Ballero, University of Cagliari)



MICROREVIEWS

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The Allenic Pauson–Khand Reaction in Synthesis

Keywords: Allenes / Carbonylation / Cycloaddition / Organometallics / Synthetic methods

