

## Xanthene derivatives

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20- 131

A Novel and Efficient Route for the Synthesis of Hydroxylated 2,3-Diarylxanthones. — 3-Bromo-2-styrylchromones (II) and (VI) are prepared as key compounds in the synthesis of 2,3-diarylxanthones such as (IV) and (VIII) via Heck cross-coupling reaction with styrenes. These products are accompanied by small amounts of semioxidized intermediates [cf.(V)]. Final demethylation gives the desired title compounds [cf.(IX)], required for further evaluation of the antioxidant activity in the xanthone class. — (SANTOS, C. M. M.; SILVA\*, A. M. S.; CAVALEIRO, J. A. S.; Synlett 2007, 20, 3113-3116; Dep. Chem., Univ. Aveiro, P-3810 Aveiro, Port.; Eng.) — Mais

OH Ph 
$$\frac{Ph-NEt_{3}^{+}Br_{3}^{-}}{THF, 25^{\circ}C, [25 h]}$$
 Br  $\frac{Ph-NEt_{3}^{+}Br_{3}^{-}}{II}$  II  $\frac{H_{2}C^{\circ}Ph \ (III), A)}{160^{\circ}C, [9 h]}$  Ph  $\frac{Ph}{Ph}$   $\frac{Ph}{IV}$  54%  $\frac{Ph}{IV}$  9%

A):  $Et_3N$ , 5 mol%  $Pd(PPh_3)_4/10$  mol%  $PPh_3$  (cat.), NMP