

# Phycological Research

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**Cover** Dwarf female gametophytes of *Palmaria* sp. (Palmariales, Rhodophyta) fixed 30 min after spermatium inoculation, stained with DAPI, and observed with an epifluorescence microscope. Cells in three crustose female gametophytes emit orange autofluorescence of chloroplasts. Uninucleate spermatia emitting blue nuclear fluorescence gathered along a trichogyne (not shown) elongated from a carpogonium of the uppermost gametophyte. Most of the spermatial nuclei are at metaphase because the nuclear division concomitantly resumed from prophase upon the attachment with the trichogyne.

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