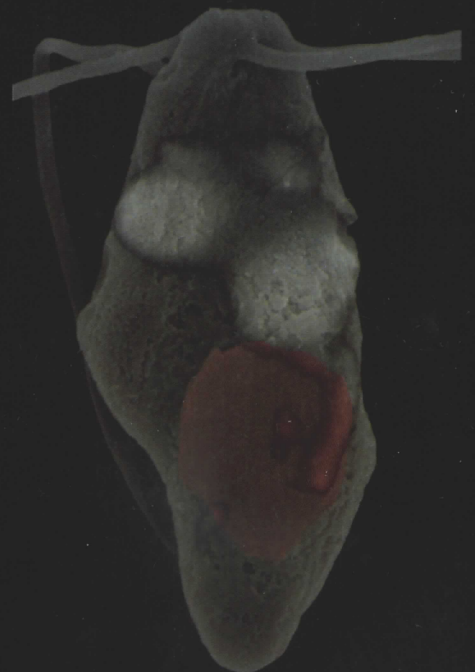


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Cover Field emission scanning electron microscope (left), fluorescence (center) and merged images (right) of the mating gametes of marine green alga *Caulerpa brachypus*, showing a correlation between the inheritance pattern of chloroplast DNA and sex-specific arrangement of cell fusion site. Large biflagellate female gamete, but not small male, has one eyespot (red) on the cell body posterior. Large white spots are nuclei and small blue fluorescence at the cell anterior and posterior respectively is mitochondrial and chloroplast nucleoids (cp-nucleoids) stained with DAPI. The female gamete containing cp-nucleoids was always fused at the anterior left side of the eyespot with the male gamete without the cp-nucleoids. See Miyamura and Nagumo in this issue.

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