國立臺灣海洋大學 海洋中心

教育部補助邁向頂尖大學計畫成果展

屬於海洋大學的基隆蟲-第一個基隆屬的生物
引起熱烈反響及媒體報導

詹雅帆、張正、蔣國平

詹雅帆發現新物種 命名基隆

【記者許瀚分／基隆報導】科學界再現「台灣之光」！海洋大學環境生物與漁業科學系博士後研究員詹雅帆，在基隆沿海發現新物種的眼蟲，並以「基隆」為名，命名為「基隆屬蚤狀眼蟲」，在今年初登上歐洲科學期刊（European Journal of Protistilogy）封面，讓「基隆」揚名海外。

詹雅帆在攻讀海大生物所博士學位期間，在海洋中心主任蔣國平及海生所教授張正的指導下，在基隆沿海做浮游生物族群生態調查研究，2007年詹雅帆在八斗子沿岸海域採樣海水，發現了一種未知的浮游生物。

3年前，詹雅帆為此飛往丹麥，與哥本哈根大學的教授研究此物種，並在2010年確定此浮游生物為新屬、新種的眼蟲。「我從來沒想過會發現新物種，真的是如獲至寶」，詹雅帆將此眼蟲命名為「基隆屬蚤狀眼蟲」。

今年初，詹雅帆發表的新物種論文，獲歐洲科學期刊採用，並登上期刊封面，自此，眼蟲在生物界分類法中多了以「基隆」為名的生物屬。

詹雅帆說，基隆屬蚤狀眼蟲生長在海底，靠細菌維生，必須靠電子顯微鏡才能看見牠，是全球體型最小、演化史上最原始的眼蟲，「可說是眼蟲的祖先」，而且目前僅在基隆沿海發現，相當稀有且珍貴。

海大為慶祝詹雅帆發現新物種，校友服務中心也特別以基隆屬蚤狀眼蟲的樣貌，發行「眼蟲票卡夾」，作為紀念。

海洋大學博士後研究員詹雅帆（右）發現新屬、新種的眼蟲，論文登上期刊封面，左為指導教授蔣國平。 圖／詹雅帆提供

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On *Keelungia pulex* nov. gen. et nov. sp., a heterotrophic euglenoid flagellate that lacks pellicular plates (Euglenophyceae, Euglenida)

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Abstract

Keelungia pulex nov. gen. et nov. sp. is described from coastal waters of NE Taiwan. The new species is heterotrophic and feeds on bacteria. Cells are oblong-ovoid, biflagellate and glide along the sides of the flask. Each cell is approximately 8–11 μm long, and one of the smallest euglenoid flagellates presently known. *Keelungia* lacks pellicular plates and in this respect resembles diplonemids and Symbiontida, which are thought to be among the basal groups of Euglenozoa. SEM showed the presence of 10 evenly spaced longitudinal striae in the cell surface, but the striae are difficult to see in the light microscope. TEM showed each stria to comprise a double set of very low longitudinal ridges separated by a shallow furrow, and supported by ca 5 microtubules beneath the plasmalemma, unlike the situation in diplonemids and Symbiontida. The cell surface was further subtended by an extensive system of rough cisternae of endoplasmic reticulum. *Keelungia pulex* is phylogenetically related to species of *Ploeotia* and to *Lentomonas applanata*, but differs in details of the feeding apparatus and in the absence of pellicular plates. Sequencing of SSU rDNA indicates that *Ploeotia, Keelungia* and *Entosiphon* form a clade near the base of the euglenoid phylogenetic tree.
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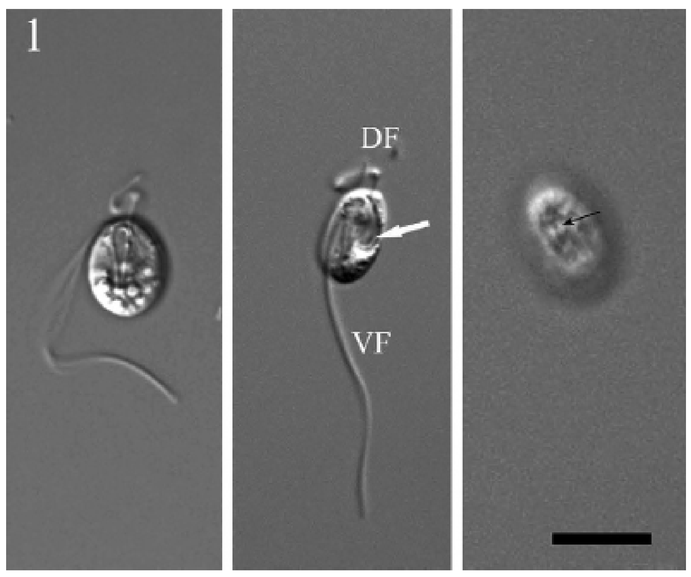
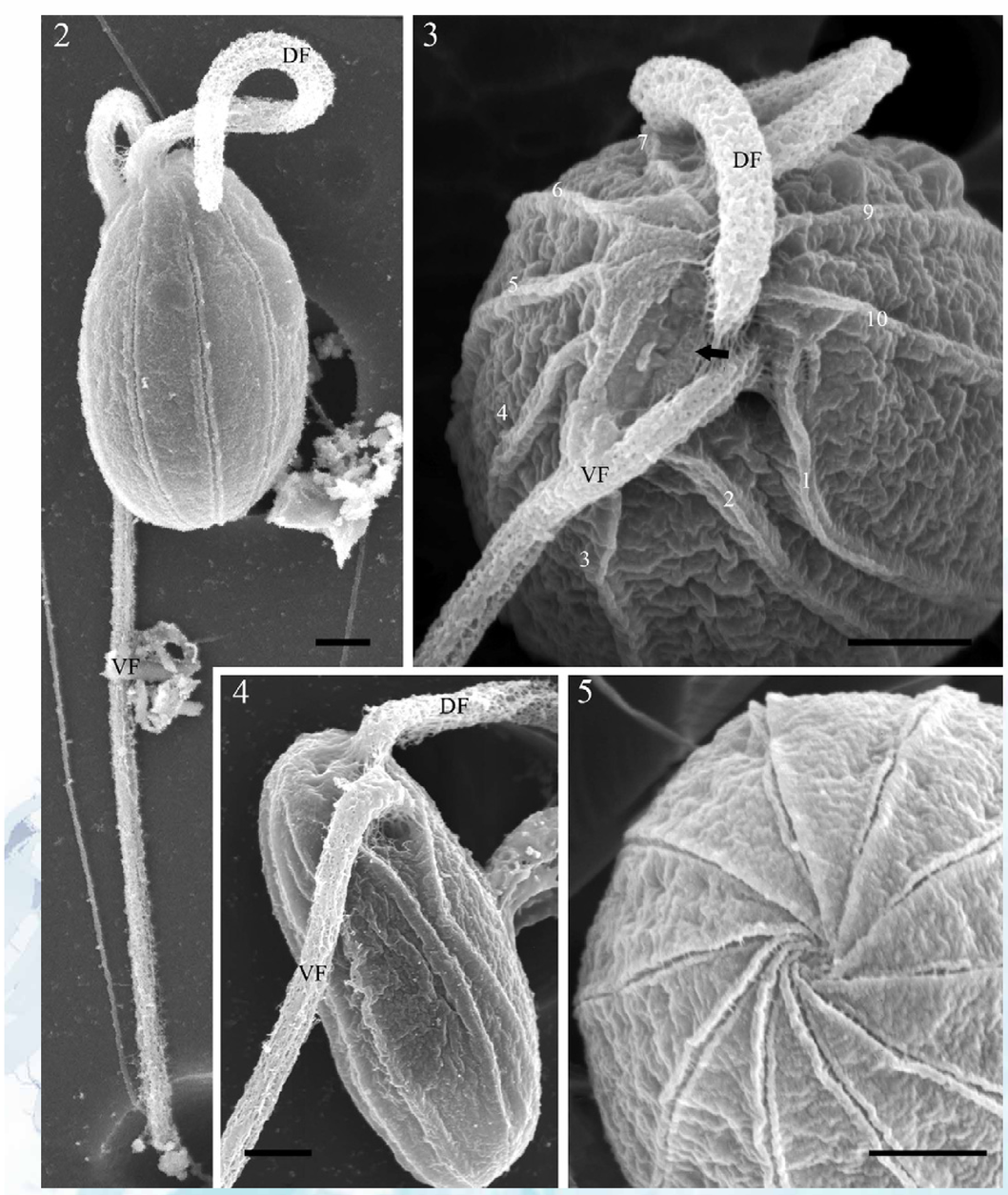
Keywords: *Keelungia pulex* nov. gen. et nov. sp.; Euglenoids; Ultrastructure; Feeding apparatus; Pellicular strips; Pellicular plates





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