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## ミョウガはどこからやってきた？ 東アジア産ショウガ属植物の予備的な分子系統解析

高野温子（兵庫県博）; Bo-mi Nam (KRIBB, Korea); Shih Wen Chung (FRI, Taiwan); Chen-Kun Jiang (Peking University, PKU); Hartmut H. Hilger (Freie Universität Berlin, FU Berlin); Theodor C. H. Cole (Freie Universität Berlin, FU Berlin)

ミョウガ (*Zingiber mioga* (Thunb.) Roscoe) は古い時代に中国から渡来し、栽培品が逸出して野生化したものと考えられてきた (e.g., 日本の野生植物改訂新版 第 1 卷. 田中 2015)。日本産ミョウガは染色体の核型研究より同質 5 倍体とされており、対する中国産ミョウガが 2 倍体であることも、この説を支持する根拠となっている。中国産ミョウガを知る共同研究者から、日本のミョウガは中国や韓国産のミョウガとは異なる分類群ではないかという指摘があり、試みに日本・韓国・中国産ミョウガの核 ITS の塩基配列を決定し、既知の台湾産他ショウガ属植物の塩基配列を加えて分子系統解析を行った。結果、日本と韓国産ミョウガは姉妹群を形成したものの、日本+韓国産ミョウガクレードの姉妹群は、なんと近年記載された台湾固有のショウガ属植物 2 種 (*Z. shuanglongensis*, *Z. chengii*) であった。中国産ミョウガは（日本,韓国産ミョウガ） + (*Z. shuanglongensis*, *Z. chengii*) クレードの姉妹群となった。今後さらにデータを増やして系統解析の精度を高めるとともに、3 か国のミョウガについて詳細な外部形態比較や染色体数、核型の確認等が求められるが、今回の結果は、日本と韓国産ミョウガが中国から移入したという説を否定している。

Where did myoga (*Zingiber mioga*) come from? Preliminary molecular phylogenetic analysis of East Asian gingers

Atsuko Takano (Hyogo Prefecture Museum); Bo-Mi Nam (KRIBB, Korea); Shih Wen Chung (FRI, Taiwan); Chen-Kun Jiang (Peking University, PKU); Hartmut H. Hilger (Freie Universität Berlin, FU Berlin); Theodor C. H. Cole (Freie Universität Berlin, FU Berlin)

"Myoga (*Zingiber mioga* (Thunb.) Roscoe) came from China in the old days, and it has been thought that cultivated products escaped and became wild (e.g. Tanaka 2015: Japanese Wild Plants, revised new edition, Vol. 1) ..."

Japanese ginger is considered to be homogeneously pentaploid according to karyotype studies, whereas Chinese ginger is diploid, which has been the basis for supporting the above hypothesis. A collaborator who knows Chinese gingers has pointed out that Japanese ginger may be a taxon different from Chinese and Korean ginger, and we have started to determine the base sequence of the nuclear ITS of several Japanese, Korean, and Chinese gingers. Then,

the nucleotide sequences of ginger plants from Taiwan were added and molecular phylogenetic analysis was performed. As a result, the Japanese and Korean gingers formed a sister group, but the sister group to this Japanese + Korean clade consists of two species of Taiwanese ginger plants that have been described in recent years (*Z. shuanglongensis*, *Z. chengii*). Chinese ginger runs as a sister group of (Japanese, Korean ginger) + (*Z. shuanglongensis*, *Z. chengii*) clade. In the future, it will be necessary to further increase the data to improve the accuracy of phylogenetic analysis, and to compare the morphology of Japanese ginger in the three countries and confirm the number of chromosomes and karyotype. This presents evidence that Japanese *Z. mioga* was not brought to Japan from China via cultivated escapees in recent times.

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