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日本産スゲ属植物に **'dauciform root'** を見出す（正木智美，星野卓二）

Tomomi MASAKI and Takuji HOSHINO: The First Report for 'Dauciform Roots' in Japanese *Carex* (*Cyperaceae*)

Summary: We found dauciform root (carrot-like swollen root) in *Carex rupestris* and *C. stenantha* (*Cyperaceae*) on the top of Mt. Senjogatake, Nagano Pref., Japan. This is the first report of 'dauciform root' on *Carex* in Japan.

日本産スゲ属植物で 'dauciform root' を初めて発見したので報告する．長野県仙丈ヶ岳の砂礫地に生育するカラフトイワスゲ（*Carex rupestris* Bell.）とイワスゲ（*C. stenantha* Franch. & Sav.）の根にニンジン型をした太い部分が見られ，これは 'dauciform root' に当たるものであることが明らかになった．日本名をニンジン型の根と呼びたい．

この「ニンジン型の根」は，ロシアのコーカサス地方に分布するスゲ属植物の根で最初に報告された（Selivanov and Utemova 1969）．その後，Davies et al. (1973) は，アイルランド北西部からイタリア北東部において，スゲ属植物を含むカヤツリグサ科植物 4 属 15 種が 'swollen lateral root'（ふくらんだ側根）を持つことを報告した．さらに，Lamont (1974) により「ニンジン型の根」を 'dauciform root' と呼ぶことが提唱された．その後，Shane et al. (2005) は，'dauciform root' が低リン酸の土壌で形成されることをカヤツリグサ科植物 4 属 5 種で実験的に示し，リン酸やその他の微量養分の吸収を促進することを明らかにした．

今回発見した 'dauciform root' は，数本の根に 1 ～ 4 個ついていた（Fig. 1）．いずれもニンジン型をしており，新しいものと枯れたものが同じ根についていることもあった．長さは 1 ～ 4 mm，一番太い部分の断面は約 0.5 mm であった．これらを観察する場合，生植物であれば新しいものは白色をしているため見つけやすいが，植物体が標本または枯れている場合は，普通の根と同じ色になり見つけるのは難しかった．

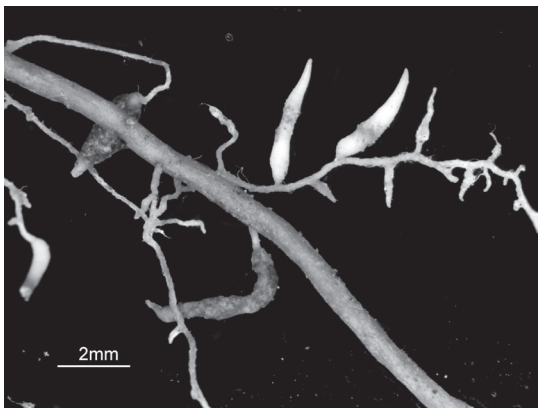

Fig. 1. Dauciform roots of *Carex stenantha* Franch. & Sav.

'dauciform root' は，ユーラシア大陸，南アフリカ，オーストラリアのカヤツリグサ科植物で発表されていたが，日本産では初めての報告となる．今回，'dauciform root'（ニンジン型の根）が発見されたイワスゲとカラフトイワスゲは，高山の砂礫地で，リン酸などの含有量が少ない貧栄養性の土壌に生育する．このような土壌条件が 'dauciform root' の形成に関係があると考えられる．今後は同様な土壌条件で日本に生育するスゲ属植物を広く調べ 'dauciform root' がどのような種に見られるか明らかにしたい．

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Hiroyoshi OHASHI[a], Tomoyuki NEMOTO[b] and Kazuaki OHASHI[c]: **Identity of *Lespedeza anthobotrya* Ricker and *L. bracteolata* Ricker (*Leguminosae*)**

Ricker の記載したマメ科ハギ属 2 種の正体（大橋広好 [a]，根本智行 [b]，大橋一晶 [c]）

Summary: Identity of *Lespedeza anthobotrya* Ricker described from a native plant collected in Gifu Prefecture, central Japan, and *L. bracteolata* Ricker from a cultivated plant in California, western USA, are clarified. Examination of each holotype of the two species indicates that the former is confirmed to be *L. cyrtobotrya* Miq. and the latter is recognized as identical with *L. buergeri* Miq.

Ricker (1942, 1946) described many new species of *Lespedeza* from Asia, in which most of them are from China but a few are from Afghanistan, Japan or United States of America, although the last was supposed to be a naturalized species from China or Korea. He described these species usually based only on a single collection of herbarium specimen(s) mostly in A, GH, or NY. Almost all the species of the genus *Lespedeza* in general show wide range of continuous morphological varitation in vegetative organs, inflorescences, and various characters of reproductive organs, hence delimitaion of the species usually needs multiple herbarium specimens for comparison with related species. Moreover, species to the subgenus *Macrolespedeza* often produce interspecific hybrids which make classification of the species difficult and complicated. Unfortunately, species described by Ricker are, in many instances, difficult to evaluate, because his species are often delimited by morphologically variable characters and based on insufficient material, usually a single collection, for reexamination of the characteristics. So far, Hatusima (1967), Akiyama (1988) and Li and Chen (1995) treated many of Ricker's species as imperfectly known species or questionable species because of less information on these species and judgement based solely on his description.

After examination of each holotype of *Lespedeza anthobotrya* Ricker (Fig. 1) and *L. bracteolata* Ricker (Fig. 2), this paper reports our identification of two species described by Ricker from Japan and United States of America. Most of Ricker's species from China are treated in other papers (Ohashi et al. in preparation).

1. **Lespedeza anthobotrya** Ricker

Lespedeza anthobotrya Ricker was