

Chenopodium ficifolium SMITH in the North Korea (D.P.R.K.)

Chenopodium ficifolium SMITH v Severní Koreji (KLDK)

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Chenopodium ficifolium SMITH was found to be common in D.P.R.K., where this species has not been so far reported. The problem of the distribution of its two subspecies, type subsp. and subsp. *blomianum* (AELLEN) AELLEN, is also briefly discussed.

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Chenopodium ficifolium SMITH occurs from the Mediterranean to East Asia, and secondary distribution has been recorded all over Eurasia (see AELLEN 1960, ILJIN 1936).

In many cases it is not discriminated from species included in *Chenopodium album* agg. and is frequently confused with them. It is a plant rather variable in height, ramification, the size of leaves, the serration of leaf margins, and in the sculpture of testa. Usually, two subspecies are distinguished: *C. ficifolium* subs. *ficifolium* and subsp. *blomianum* (AELLEN) AELLEN originally from India and East Asia (see AELLEN 1960, MEUSEL et al. 1965). The type

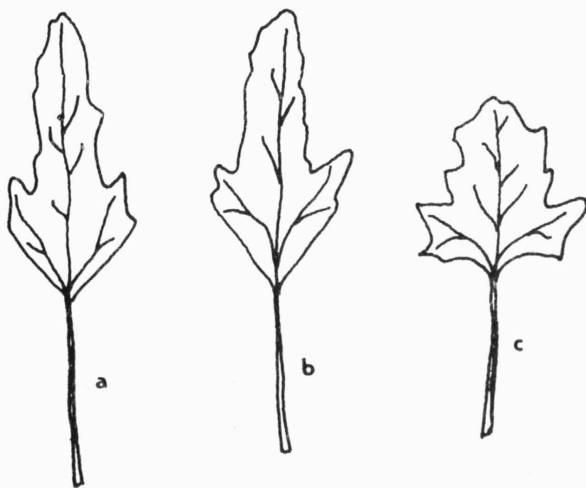


Fig. 1: a — Typical leaf shape of the type subspecies of *C. ficifolium* SMITH from Europe;
b — Typical leaf shape of *C. ficifolium* SMITH from D.P.R.K.;
c — Leaf shape of *C. ficifolium* subsp. *blomianum* var. *formosanum* (MURR) AELLEN (according to AELLEN 1960).

subspecies have somewhat larger, broader, forward or outward oriented side lobes of leaves and seeds with regular, often hexagonal pits. On the other hand, the subsp. *blomianum* (AELLEN) AELLEN has small, outward oriented side lobes and the sculpture of testa is more irregular.

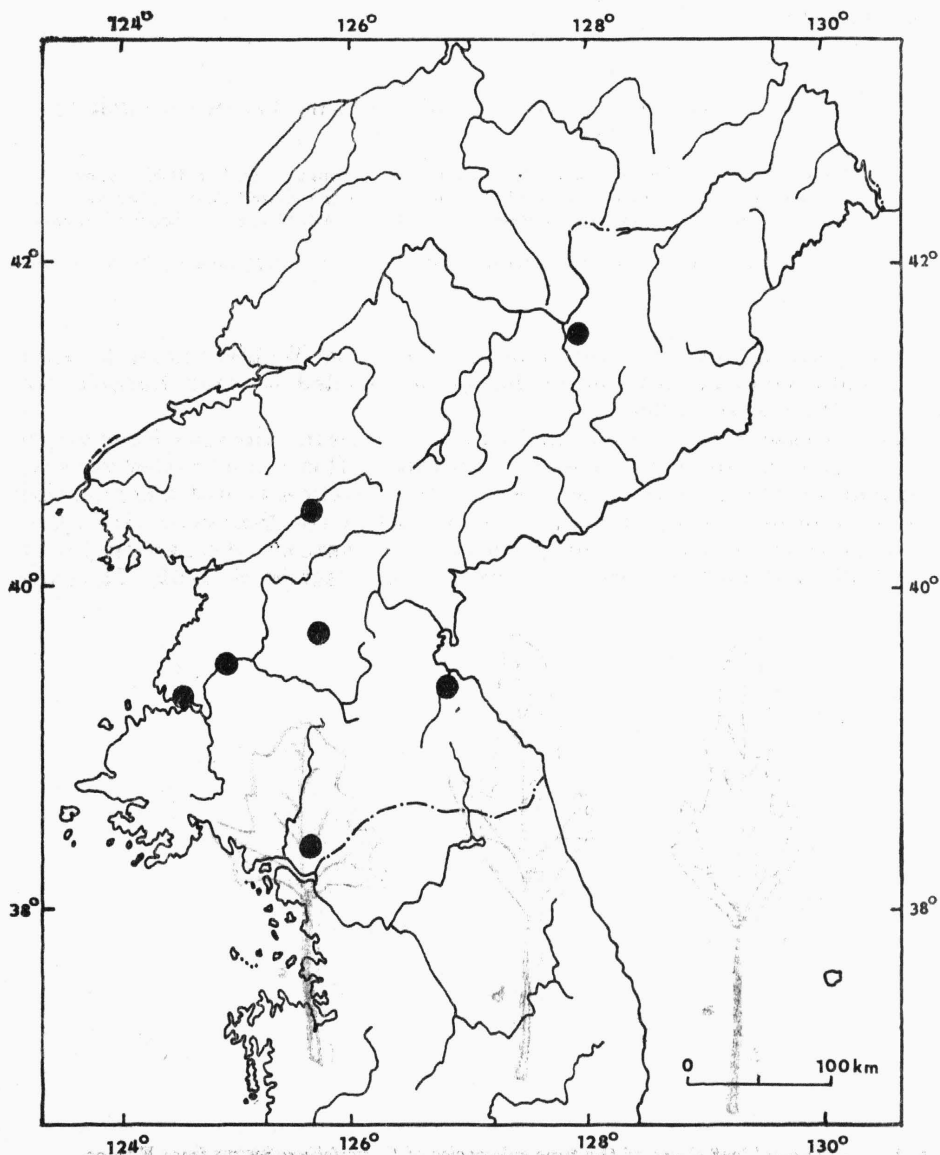


Fig. 2: The localities in D.P.R.K., where the occurrence of *C. ficifolium* SMITH was observed.

C. ficifolium SMITH, is, in some cases, given as a synonym for *C. serotinum* L. Nevertheless, the name *C. serotinum* L. is not correct; it refers to two other different species (see BEAUGÉ 1974).

AELLEN (1960) reports, that in China, Korea, Japan and Taiwan, a peculiar variety of *C. ficifolium* SMITH can be found, namely *Chenopodium ficifolium* subsp. *blomianum* var. *formosanum* (MURR) AELLEN. The broader conception of the occurrence of *C. ficifolium* SMITH in this region, but without concrete data, is also given by KITAGAWA (1979).

During my visit in D.P.R.K., I observed abundant occurrence of this species (see Fig. 1), partly in field cultures, particularly in root-crops (potatoes) and vegetable crops (cabbage, Chinese cabbage, cucumbers). Furthermore, in almost all ruderal places including trampled communities of the *Zoysio-Plantagion depressae* DOSTÁLEK, MUCINA and HWANG H-JUN associations (see DOSTÁLEK, MUCINA and HWANG HO-JUN in press), where it probably penetrates due to humid climate and, perhaps, more saline soils. This species has been neither reported from the North Korea (see FLORA COREANA 1979) nor documented by foreign authors.

All specimens collected and observed in D.P.R.K. can be unambiguously classed with the type subspecies on the basis of correspondence of the leaf shape characters (see Fig. 2) and the sculpture of testa, and identified with European plants belonging to this subspecies. However, I did not see any plants belonging to the subsp. *blomianum* (AELLEN) AELLEN.

Therefore, it can be concluded from these observations that Aellen's hypothesis (see AELLEN 1960) about the East-Asian subspecies *C. ficifolium* SMITH is not applicable in the case of the findings from D.P.R.K. Also the delimitation of the area of both subspecies is, in my opinion, problematic, since the plants from East Asia can be ranged with the type subspecies and, last but not least, also for synanthropic dispersal of diaspores of this species.

The subsp. *blomianum* (AELLEN) AELLEN is most likely only one of many types within the range of variability of *C. ficifolium* Smith.

SOUHRN

V KLDR byl zjištěn hojný výskyt z této oblasti dosud neuváděného druhu *Chenopodium ficifolium* SMITH. Ani jeden z pozorovaných exemplárů nepatří k *Chenopodium ficifolium* subsp. *blomianum* (AELLEN) AELLEN, kterou v této oblasti předpokládá AELLEN, nýbrž k jeho nominální subspecii. Z těchto důvodů se zdá být problematická AELLENŮVA hypotéza o západním a východním vikariátu tohoto druhu. Subsp. *blomianum* (AELLEN) AELLEN je s největší pravděpodobností pouze jedním z mnoha typů v rámci variability *Chenopodium ficifolium* SMITH.

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