

NEW SPECIES AND NEW RECORDS OF ASTERACEAE FROM IRAN

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Two new species, *Lactuca birjandica* and *L. gilanica* (Asteraceae) are described. In addition, a new record, *Cichorium glandulosum* Boiss. & Huet. is reported for Iran. Furthermore an interesting collection of *Lactuca muralis* L. from Gilan Forest in Iran is discussed for the first time. Taxonomic characters and illustrations are given for all species.

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Key words: New species; new record; *Lactuca*; *Cichorium*; Gilan; Iran.

گونه‌های جدید و گزارش‌های تازه از تیره کاسنی در ایران.

ولی‌اله مظفریان، دانشیار مؤسسه تحقیقات جنگلها و مراتع کشور.

دو گونه جدید برای جهان گیاه شناسی شرح داده می‌شود، همچنین یک گزارش تازه و گونه‌ای جالب از جنگل‌های گیلان برای ایران تشخیص داده شده که تصاویر آن‌ها ارایه می‌گردد. گونه‌های جدید شامل:

Lactuca birjandica و *Lactuca gilanica* (Asteraceae)

و گزارش‌های تازه به نام *Cichorium glandulosum* Boiss. & Huet. و *Lactuca muralis* L. گونه جالب توجه از جنگل‌های گیلان است. صفات تاکزونومیکی و تصاویر همه گونه‌ها ارائه شده است.

INTRODUCTION

During the study of author's plant collections from different parts of Iran (Gilan), the author have come to conclusion that the following taxa are clearly distinct from any *Lactuca* species which were formerly reported from Iran (Matthews 1975, Rechinger 1977, Kirpichnikov 2001).

Lactuca L. (Asteraceae, Lactuceae) with about 100-150 species is one of medium-sized genera of vascular plants in the world. The *Lactuca* species are adapted and chiefly distributed in Eurasia extending to tropical & S. Africa and with few species in N. & C. America.

According to Flora Iranica 12 species of *Lactuca* are growing in Flora Iranica area of which 9 species grow in Iran, that also are distributed in Iraq, Afghanistan, Pakistan, India (Mt. Himalayas), C. Asia, Caucasus and Transcaucasia. Regarding to these new and a record species the number of *Lactuca* species in Iran increases to 12. Two of them are annual and the others are perennial.

Annual, perennial, with variable habit, leaves herbaceous or subcoriaceous, more often pinnately-lobed or pinnatisect or runcinate, rarely dentate or

sublyrate. Capitula usually in paniculate synflorescence, with 3-26 flowers, mostly cylindric, with (2-) 3-4 series of herbaceous phyllaries. Receptacles glabrous, ligules yellow, sky-blue to purplish. Achenes 2-6 x 1 mm, flattened, oblong-obovate, oblong-elliptic or oblong-linear, 4-20 ribbed, brown to dark brown or blackish, rostrate. Pappus 2.5-7 mm long, white. The new records, *Lactuca muralis* L. is a distinct species with having only 5-flowers and 2-series of phyllaries sometimes included in the genus *Mycelis* Cass. (Kirpichnikov 2001).

The aim of this paper is to describe two new species and report a new taxon for the flora of Iran and point to an interesting species from Gilan. The specimens of all taxa are preserved in TARI.

New species

Lactuca birjandica Mozaff. sp. nov. (fig. 1).

Perennial, many-stemmed, greenish, caespitose, glabrous. Stem 50-80 cm high; nearly striate, in lower parts leafy, at $\frac{1}{3}$ divaricate-furcate branched in $\frac{1}{3}$ upper part, rather thick, \pm leafless. Leaves often basal, very likely rosulate or nearly basal; petiole absent or very

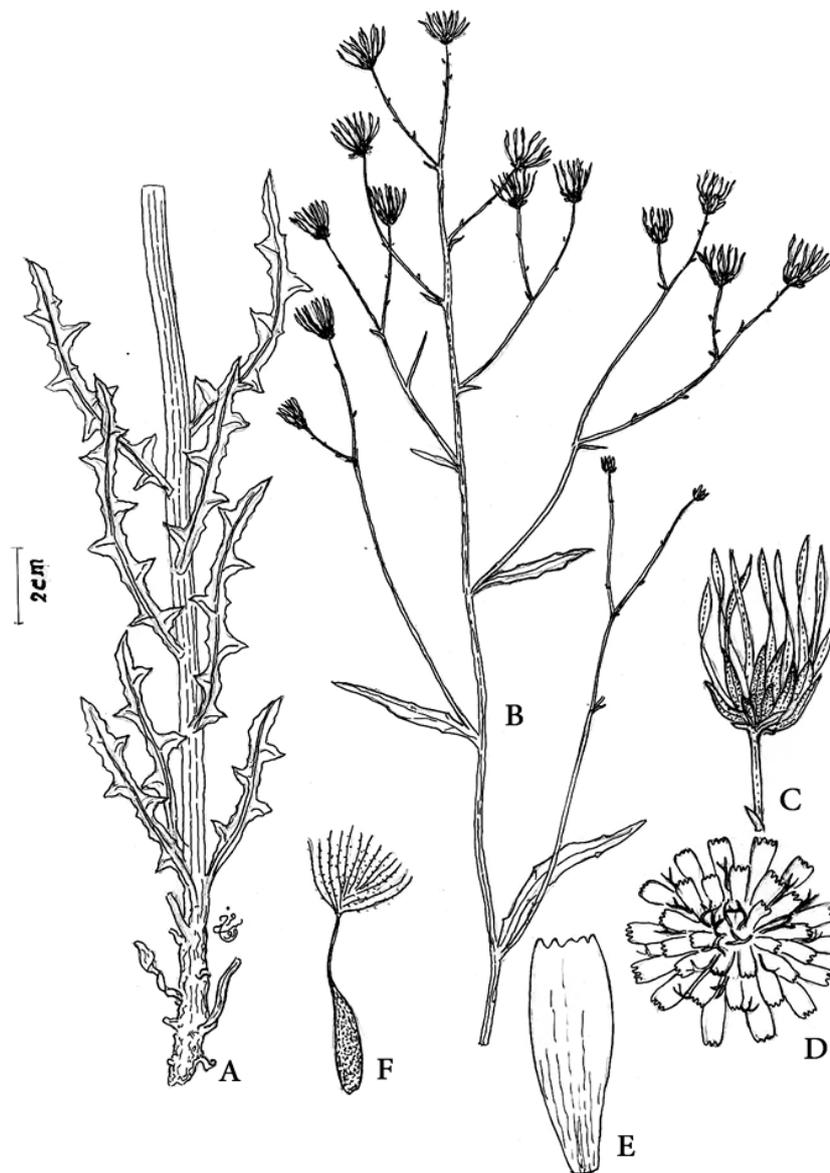


Fig. 1. *Lactuca birjandica* Mozaff. A, & B, habit; C, opened capitulum; D, feature of capitulum from above; E, ligule; F, achene.

short, including the 8-15×1.5-3 cm petiole, oblong-lanceolate, nearly lobed-sinuate or pinnately lobed; lobes horizontally spreading, or entire or ± turned backwards; subtended branches leaf entire, at the base hastate-auriculate; upper most stems or branch leaves decreased to scales. Synflorescence often large; capitula arranged in ones on the top of the narrowed branches, 20-30 flowered. Involucres 10×8 mm, glabrous; phyllaries 3-4 seriate, loosely imbricate, outer involucre bracts small, acute lanceolate-triangular, the

inner involucre bracts linear, black-tipped. Corolla pale red. Achenes 3×1 mm, oblong-elliptic, compressed, 3-5-costate, pale brown; rostellum white, 2 mm; pappus 2.5-3 mm long; white.

Affinity: The new species with having many stems and ± leathery glabrous basal leaves is an isolated species and there are not very close species to it in the Flora Iranica area and Flora of USSR.

Typus: Khorassan, Birjand, Kuh-e Bagheran from Band-e Omar Shah valleys 32° 47' N; 59° 10' E, 2024 m, Mozaffarian 97408 (TARI).

***Lactuca gilanica* Mozaff. sp. nov.** (fig. 2).

Perennial herb, rootstock mostly robust, with conspicuous underground long spindle-shaped tuber, entirely glabrous. Stems 100-120 cm high, erect, regularly leafy in upper part, paniculately branched above. Basal leaves dying off at flowering period; lower stem leaves thin herbaceous, sessile, more or less rounded auriculate, in outline oblong-lanceolate, sinuate-lobed, along margin nearly irregularly toothed; upper stem leaves oblong-lanceolate, more or less loosely crenate-dentate, conspicuously rounded-auriculate; leaves of branches small, conspicuously rounded-auriculate more or less amplexicaul; leaves in uppermost branches scale-like. Synflorescence with divaricate thin branches. Heads cylindrical, glabrous, 8-9 mm long, 2.5-4.5 mm wide, sessile on short branches, terminal or nearly lateral, 10-15-flowered. Involucral bracts in two to three rows, imbricate, outer ones lanceolate, obtuse, short; inners linear-lanceolate, obtuse, erect, narrowly to slightly scarious along margins, with black spots on the back. Corolla orange-red. Achenes compressed, ovate-orbicular, glabrous; rostellum short, ca. 1 mm long; pappus 5 mm long, white.

Affinities: The new species with spindle-shaped rootstock is isolated in Flora Iranica region, but it is close to *Lactuca raddeana* and *Lactuca triangularia* in Flora of USSR area but differs from them in exactly glabrous leaves, and conspicuously rostellate achenes.

Typus: Gilan Fuman, Masule, along Gilevand road, 37° 08' 22" N; 49° 04' 11" E, 660 m, Mozaffarian 97409 (TARI).

New records

***Cichorium glandulosum* Boiss. & Huet** (fig. 3).

Specimens seen: Azarbaijan: Miane, Bozghoush mountain region, Gharibdust village 1670 m, V. Mozaffarian 93484 (TARI); Chahrmahal-e Bakhtiary: Farsan, Deh-e Cheshme towards Gushe Village, 2100 m, N. 32,13,64; E. 50,32,31, V. Mozaffarian 97362 (TARI); Ilam: Eivan, Bankul, Mozaffarian without herbarium number,

Slender annual up to 60 cm. Leaves sparsely pubescent; basal leaves shortly petiolate, obovate, dentate; cauline leaves sessile, somewhat auriculate, lanceolate, dentate except uppermost which are entire. Capitula up to 1 cm broad, borne at end of slightly thickened glandular-hairy peduncles. Phyllaries glandular-hairy; the outers ovate-elliptic; the inners

narrower, ±equal in length to the outers. Pappus ca 5 × shorter than achene.

This species was recently collected from different parts of Iran specially from crop fields. A distinct species with dense glandular stem and capitulum. Its general distribution is the Irano-Turanian Region in Turkey, Syria and Iran.

***Lactuca muralis* (L.) Gaertn.** (fig. 4).

Syn: *Mycelis muralis* (L.) Dumort.

perennial rhizomatous herb with short stock. Stems erect, glabrous, 20-100 cm. leaves membranous, glabrous, alternate, lyrate-pinnatisect, with 2-6 lateral lobes; basal with petioloid bases, uppers sessile, ± auriculate, usually glabrous. Capitula ligulate, homogamous, 5-flowered. Involucre narrowly cylindrical; phyllaries 2-seriate, those of outer row much shorter than inner. Receptacle naked. Flowers yellow. Achenes homomorphic, fusiform, blackish-brown, subcompressed, many-ribbed, beaked; beak comparatively stout. Pappus white

Specimen seen: Gilan: road from Asalem to Khalkhal, Almas neck mountain, Shahgerdekuh, Kal-e Kal-e forest, 37° 38' 45" N; 48° 44' 36" E, 1504 m asl, Mozaffarian 97530 (TARI)

This is an interesting species which has been recollected after many years from Arasbaran and then from Gilan at the altitude of ca. 1500 m in rather dense *Fagus orientalis* forest.

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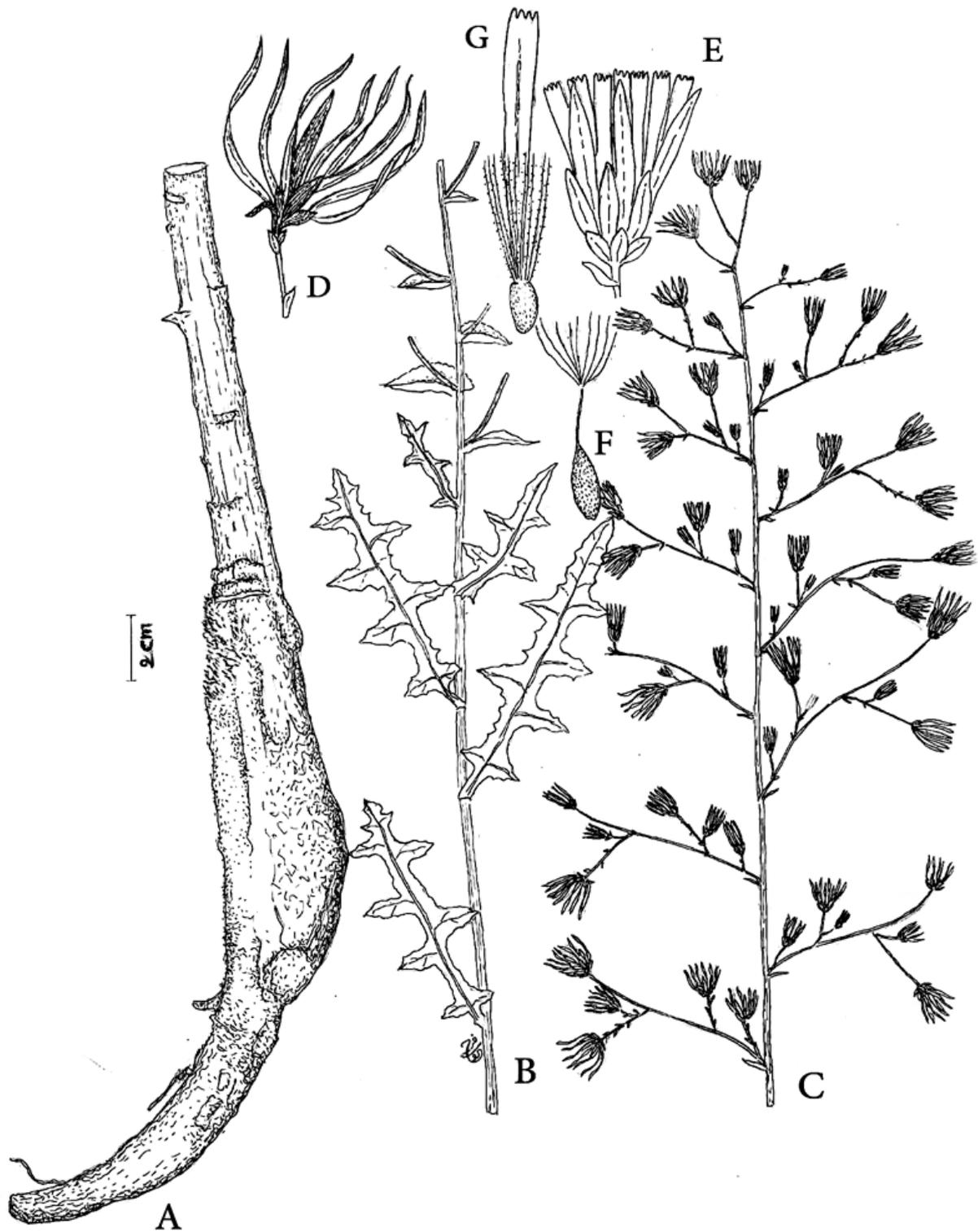


Fig. 2. *Lactuca gilanica* Mozaff. A, rootstock; B, lower part of stem; C, upper part of stem. D, opened capitulum; E, capitulum; F, and G, achenes.

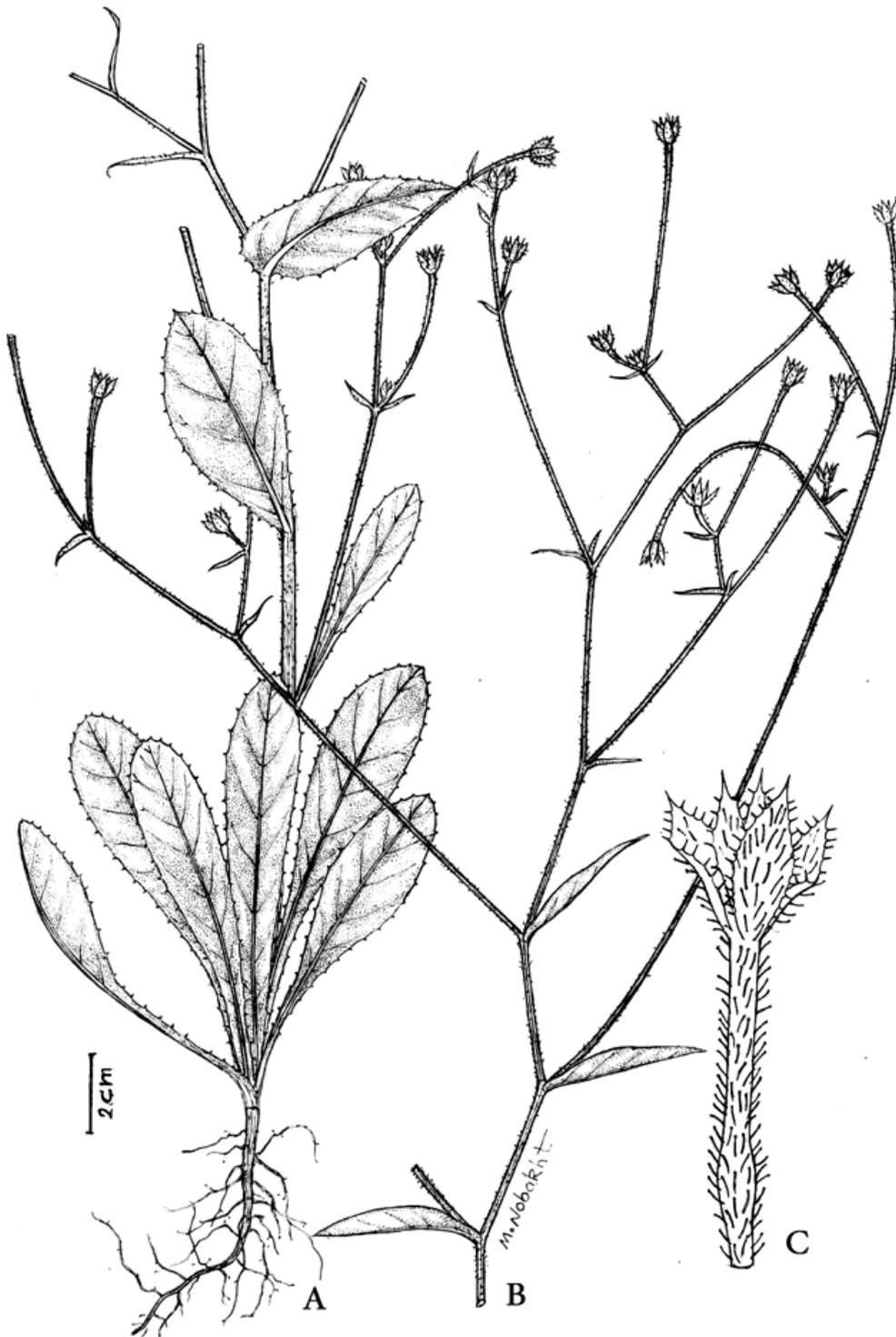


Fig. 3. *Cichorium glandulosum* Boiss. & Huet. A and B, feature of plant; C, upper part of peduncle, phyllaries and its indumentum.

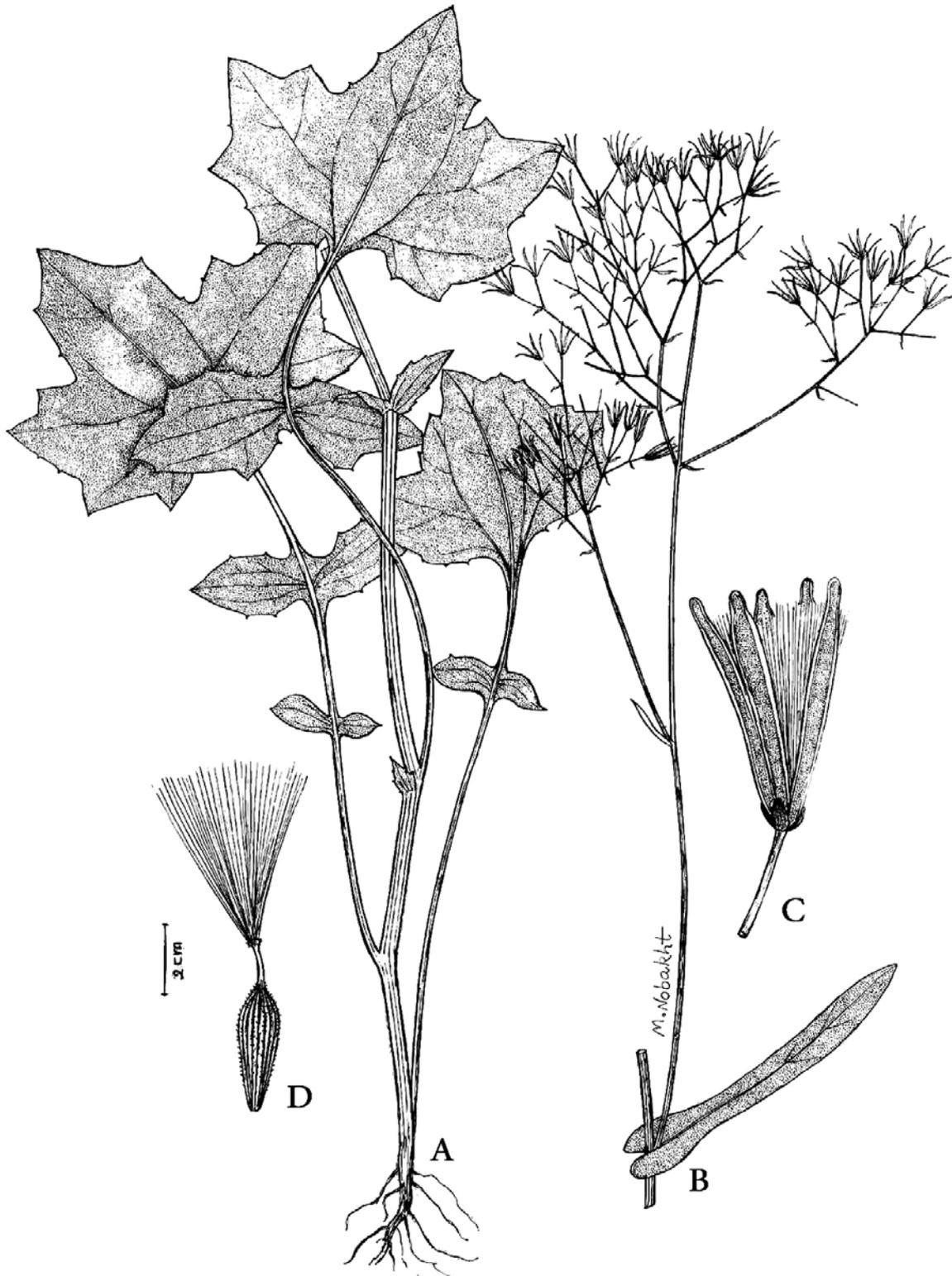


Fig. 4. *Lactuca muralis* L. A, lower stem leaves; B, flowering branches; C, capitulum; D, achene.