

タイ北東部の新種のみみかきグサ *Utricularia ramosissima* について
Utricularia ramosissima (Lentibulariaceae), a new species from north-eastern
Thailand

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平成22年2月までにタイを訪問すること10回となりました。最初の訪問のときに見つけたみみかきグサについて、今まで知られているみみかきグサの中で他にはない花茎を着けるみみかきグサであり、新種ではないかとの思いから報告するものです。

Summary. *Utricularia ramosissima* Wakabayashi (Lentibulariaceae) is described from Ubon Ratchathani, north-eastern Thailand. The morphological characteristics which distinguish this new species are discussed, together with its distribution and ecology.

Key Words. Thailand, Ubon Ratchathani, Lentibulariaceae, new species, *Utricularia*.

このみみかきグサの生育する、ウボンラーチャターニー県はタイ北東部の州のひとつです。ウボンラーチャターニー県はバンコクから約600km離れたところにあります。北と東はラオスに国境を接し、南はカンボジアに接しています。タイ東北部は平均高度200メートルのコラート大地上にあります。

タイの気候はケッペンの気候区分では熱帯性に分類されモンスーンの影響が大きい。雨季（5－10月）、乾季（10－2月）、暑期（2－5月）の3つ季節に分かれます。通常気温は19－38℃です。

この地方では、およそ8種類の食虫植物が知られています。このうち、みみかきグサは、ホザキノみみかきグサ、オドラタ、デルフィニオイデス、ヒルタ、ノタヌキモが生育しています。みみかきグサは雨季の間に種子から生育し、雨季の終わりから乾季の初めに花を咲かせます。10月から11月にかけてが花の見ごろとなり、12月にはほぼ乾燥のため枯死してし

まいます。ただ、Pha Taem National Park の Soi Sawa では、中央のクリークよりポンプで水を揚げて冠水ししたり、水の多く湧き出している所があるため1月まで開花がみられます。

この国立公園のネームプレートでは、このミミカキグサは *U. minutissima* Vahl と間違われてきました。(*U. odorata* Pellegr も *U. bifida* (L.) と間違われています。)

Utricularia ramosissima は、ウボンラーチャターニー県の2か所の国立公園で確認しています。1つはウボンラーチャターニー県の東のはずれ、メコン川でラオスと国境を接している所にある、Pha Taem National Park 内で、もう1つは、ウボンラーチャターニー県の南のはずれにある、Phu Chong Na Yoi National Park で生育します。

INTRODUCTION. Ubon Ratchathani (often in short Ubon) is one of the north-eastern provinces (changwat) of Thailand. Ubon is about 600 km away from Bangkok. To the north and east it borders Laos, to the south Cambodia. Ubon is on the Khorat Plateau(The Khorat Plateau also Korat Plateau, is a plateau in the north-eastern region of Thailand, also called Isan), the average elevation is 200 m.

Most of Thailand has a Tropical wet and dry or savanna climate (Aw) according to the Köppen climate classification, while the South and the eastern tip of the East have a tropical monsoon climate (Am); temperatures normally range from an average annual high of 38 °C to a low of 19 °C. During the dry season, the temperature rises dramatically in the second half of March, spiking to well over 40 °C in some areas by mid April. Southwest monsoons that arrive between May and July (except in the South) signal the advent of the rainy season, which lasts into October. November and December mark the onset of the dry season. Temperatures begin to climb in January, and a hot sun parches the landscape.

Nearly 8 species of the carnivorous plant are known to Ubon. among these, 5 species of genus *Utricularia* L.: *U. caerulea* L., *U. odorata* Pellegr. *U. delphinoides* Thorel ex Pellegr., *U. hirta* Klein ex Link, *U. aurea* Lour.

In January 2003, a unidentified species of *Utricularia* was observed growing at

two places on Pha Taem National park. In the name tag of this national park, this *Utricularia* has been misunderstood to *U. minutissima* Vahl.

Based on field studies and herbarium specimens, this new species of *Utricularia* is described below.

***Utricularia ramosissima* Wakabayashi, sp. nov.**

Typus: Thailand, Ubon Ratchathani, Pha Taem National Park, Soi Sawan, N15°27'21.7" E105°34'34.2" Alt.218m, H. Wakabayashi, 2010 (holotypus NDC, 1 Jan 2010)

Small to medium-sized, probably perennial, however, annual in the habitat for dryness, terrestrial. Rhizoids numerous, capillary, simple, 0.05-0.1 mm thick. Stolons few, capillary, sparsely branched, a few cm long, c. 0.1 mm thick. Leaves few from the stolons, long petiolate, the lamina very narrowly obovate, 0.1-0.3 mm wide, 1-nerved; total length 0.8-1.5 cm. Traps numerous on the rhizoids and on the leaf petioles, ovoid, stalked, 0.1-0.2 mm long, mouth lateral, with two rows of glandular hairs near the stalk and a single appendage on the opposite side of the mouth. Inflorescence erect, solitary, 10-30 cm long; peduncle terete, wiry, 0.05-0.2 mm thick, glabrous, very branched near apex. Scales numerous, similar to the bracts. Bracts basifixed, narrowly to very narrowly ovate-deltoid, with apex acute or acuminate, 1.5-2 mm long and longer than the pedicel. Bracteoles similar to the bracts. Flowers 10-50 (-100), the panicle, each bract which subtends a flower having a bract subtending an aborted or dormant bud a short or very short distance above it, widely spaced, usually held such that mouth of the flower is horizontal, scape repeats branching in the place of the flower, and 50 flowers or more are made to bloom. Calyx lobes subequal, convex, firm and opaque, minutely papillose, with prominent simple nerves; upper lobe ovate, with apex acute; lower lobe similar. Corolla 4-5 mm long, purple or mauve; upper lip narrowly oblongobovate from a broader deltoid base, with apex truncate or emarginate; lower lip with a yellow blotch at the palate and white, limb larger, approximately circular, the base with a rounded, 2-lobed swelling, the apex rounded or acuminate., distinctly 3-lobed; palate with a slightly raised, yellow blotch on white; spur 5-6 mm long,

subparallel to lower lip, subulate from a broadly conical base, with apex acute. Ovary elliptic; 2 mm long, the anther thecae distinct. stigma lower lip transversely elliptic, the upper lip much smaller. Capsule ellipsoid, c. 2 mm long. Seeds flat oval, testa reticulate, reticulations elongate, c. 0.12-0.15 mm long. Fig. 1.

DISTRIBUTION. Thailand (north-eastern): Ubon Ratchathani [Pha Taem National Park, 4 January 2003 & 1 January 2010; Phu Chong-Nayoi National Park, 4 November 2006]. Fig.2.

ECOLOGY. Plants in post-monsoon marshy ground. wet or damp places, open ground among short grass, often on sandy soil, occasionally on rocks, from 200-250 m. Flowering and fruiting from September through till February(only Soi Sawan, ground level flower garden), but mainly in October and November.

CONSERVATION STATUS. *Utricularia ramosissima* is present in protected areas of a national park.

ETYMOLOGY. The specific epithet *ramosissima* refers to the very branched peduncle of this species.

NOTES. *Utricularia ramosissima* is placed in sect. *Meionula* P. Taylor because of its trap morphology.(i.e. multicellular dorsal appendage and lateral and ventral rows of basally connate, usually gland-tipped trichomes, the capital cells of which are botuliform, the internal glands 2- and 4-armed, the arms straight).

Utricularia ramosissima has a much more restricted range than *U. minutissima*, *U.hirta* and *U.geoffrayi* closely resembles to them. It can however be distinguished from them by its very branched peduncle, very short pedicels, narrower, strongly nerved calyx lobes, spur is longer than lower lip and its glabrous inflorescence. Very branched peduncle is only this species in genus *Utricularia* L. known now.

Key to *Utricularia* sect. MEIONULA

This key is adapted from Taylor (1989: 238) adding *Utricularia ramosissima* as follows:

1. Calyx densely covered with long to short multicellular hairs 38. *U.hirta*
1. Calyx glabrous
 2. Pedicel longer than the subtending bract 37. *U.minutissima*
 2. Pedicel shorter than the subtending bract
 3. Peduncle the raceme axis elongate 39a. *U.geoffrayi*
 3. Peduncle very branched near apex 39b. *U.ramosissima*

REFERENCES

Taylor, P. (1989); *The genus Utricularia - a taxonomic monograph*. Kew Bull. Addit. Ser. XIV. HMSO, London.

John A.N. Parnell; *An Account of the Lentibulariaceae of Thailand*. Thai Forest Bulletin (Botany) 33: 101-144. 2005.

Bob Ziemer; *Carnivorous Photo Finder*. Webpage; <http://cpphotofinder.com/>.

Utricularia ramosissima は、調べていくにつれ形態が *Utricularia geoffrayi* に非常に似ています。ごく近縁であると思われます。この種はあまりにも小さい捕虫囊ため、最初、何度根を洗っても捕虫囊を見つけることができませんでした。日本に帰ってから標本の根をマイクروسコープで拡大して見ていた時、そこに捕虫囊がいっぱい着いていることに気づき、急遽、再度タイへの訪問となりました。また、まだ訪れたことのない Mukdahan National Park (Phu Pha Thoep National Park)も同様にデルフィニオイデスやオドラタが生育しますので、この種も生育している可能性があります。もう、乾燥してしまっていますので、また、来年訪問したいと思います。

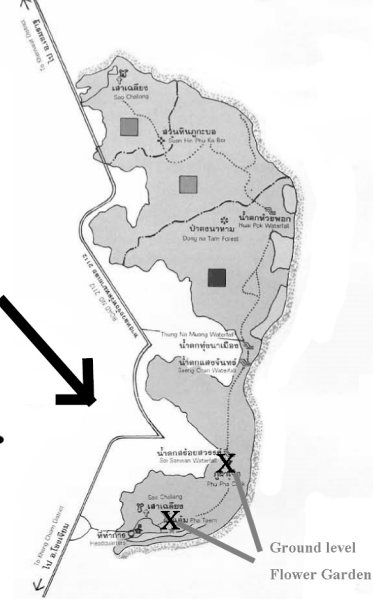


Fig.1 *Utricularia ramosissima* ; A & B habit , x0.8 ; C leaf with trap , x5 ; D trap , lateral view , x200 ; E trap , dorsal view , x200 ; F corolla , x5 ; G flower , upper view , x5 ; H & J flower , lateral view , x5 ; K flower , rear view , x5 ; L bract & bracteoles , x7 ; M calyx , x7 ; N seed , lateral view , x100 ; P ovary , x10 ; Q & R peduncle , x5 ; S flower bud and peduncle , x5 ; T scale in situ , x10 ; U & W branching scape and fruit , x10 ; X stamen , x10 ; Y pistil , x10 ; Z upper lip of corolla , x10

Map of Thailand



แผนที่แสดงแหล่งท่องเที่ยว อุทยานแห่งชาติผาแต้ม Pha Taem National Park Map



Phu Chong Na Yoi National Park อุทยานแห่งชาติภูจอง-นายอย



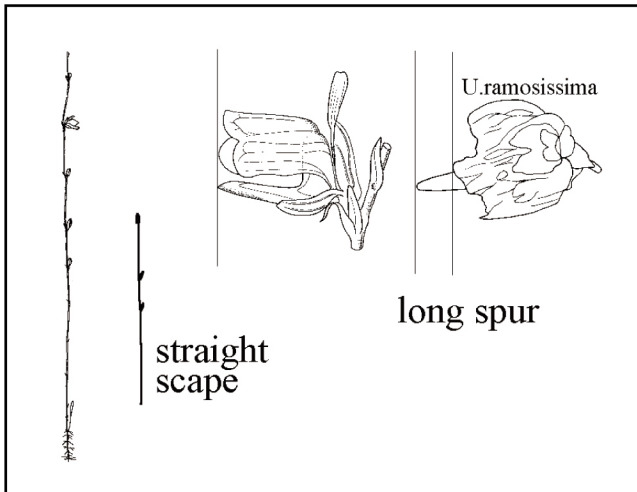
Fig.2



U. ramosissima



U. minutissima



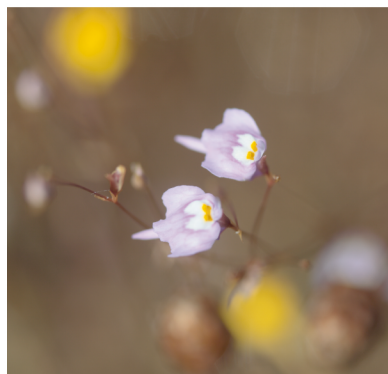
U. geoffrayi



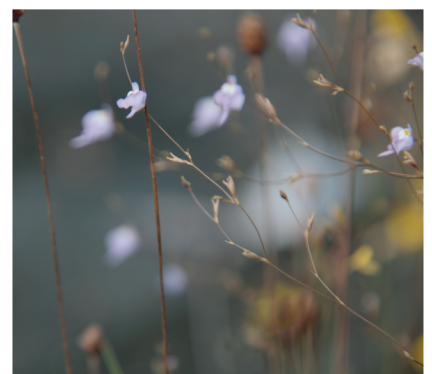
U. hirta



Specimen (holo type)



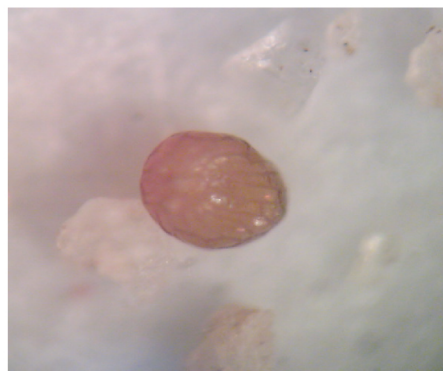
flowers



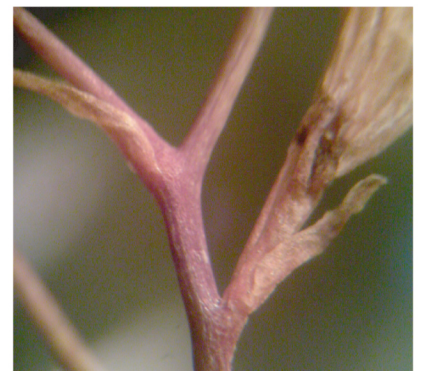
peduncle



traps



seed



branching scape and fruit