



New Discoveries on Socotra

Joël Lodé & Mildred Canales (Spain)

My last two journeys to Socotra provided the opportunity of discovering new succulent plants and allowing clarity of the position of some species for which the taxonomy was confused.

Nowadays, thanks to the systematic covering of gridded areas, it is still possible to discover new taxa. For more than five years, I learnt a little about Socotra and its flora, as well as its fauna. My last two journeys, the last of which this year was made with my wife, Mildred, offered us new data on known, but poorly identified species, as well as new taxa, of which some are still in the course of molecular studies, however some of them are presented here as new species to science.

It is also possible that Mildred made a sensational unexpected discovery of: a new species of lizard, but this is still in the course of study.

***Cissus salehi* J.Lodé 2013 spec. nova (Vitaceae)**

Description: climbing to hanging shrub. Very long, articulated stems various meters, 12-15 mm large and 5-6 mm thick, rectangular in section, pale green, flowers in wide panicles. It occurs at low altitude on slopes, growing into shrubs.

Cissus hamaderoensis Radcliffè-Smith *similis sed pallidi viride, longe et pendulis*, *Cissus paniculata* Heyne ex Wallich *similis sed sectio rectangulum*.

Type: Socotra (Yemen). *Cissus salehi* grows on Dixam, near Wadi Derhour, located in the centre of the island, between 300-400m in altitude, in the shade, by using the surrounding shrubs.

Joël Lodé & Mildred Canales, April, 2013, JL2013-01 (holotype: UMH, herbarium sheet 2014).

Comments: this species is similar to the other three found in Socotra, with very long articulated stems, but with the typically rectangular section (*C. hamaderoensis* has rather quadrangular and more or less winged stems, *C. paniculata* has cylindrical stems, those of *C. subaphylla* are flattened but never angular).



Cissus salehi sp nova, Dixam-Wadi Derhour, Socotra



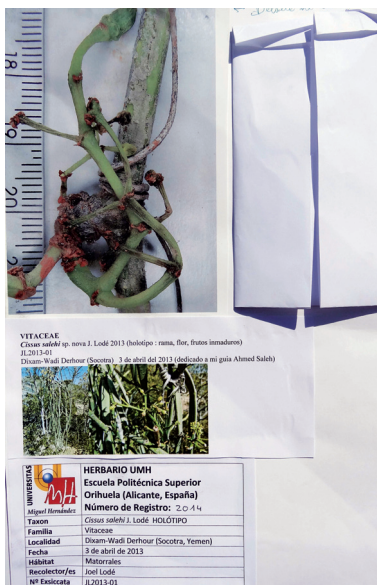
Cissus hamaderoensis Socotra



Cissus subaphylla, Ras Hebak, Socotra



Cissus paniculata Mts Haggier, Socotra



Cissus salehi, Dixam, Socotra. © J.L. left, herbarium specimen (courtesy of Diego Rivera).

This new species is dedicated to my Socotran friend and guide Ahmed Saleh,, who participated in all of my trips, and who has shown, since the beginning, a growing interest for the succulents found on his island. For the anecdote, it is apparently the first plant of Socotra among more than 850 existing species on the island, that is dedicated to one of his inhabitants!

***Portulaca monanthoides* J.Lodé 2013 spec. nova (Portulacaceae)**

Basionym: *Portulaca sedifolia* A.G.Miller 2004 **nom. illeg., not *P. sedifolia* N.E.Brown 1894**

Description: tiny plant with leaves arranged in compact groups, strongly succulent, spherical to egg-shaped, appearing like truncated in period of dryness, with yellow flowers on a long, erected pedicel.

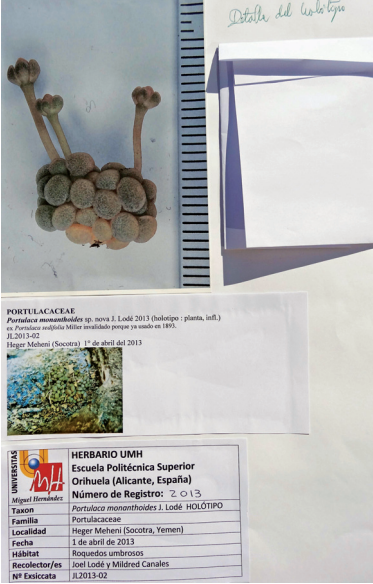
Type: Socotra (Yemen). *P. monanthoides* grows in the southwest of the island, on Heger Meheni, we found it between 200 and 350 m in altitude, in the cavities of eroded limestone rocks. I so called it because of the resemblance to *Monanthes*, Crassulaceae of the Canarian Islands.

A. Miller, 2001, R. Atkinson and A. Khulaidi 22012 (holotype: E, isotype K).

Joël Lodé & Mildred Canales, April, 2013, JL2013-02 (holotype: UMH, herbarium sheet 2013).

Comments: the name *Portulaca sedifolia* having already been used in 1894 by N.E. Brown to designate another species native to South America and having nothing to do with the Socotran species, makes *P. sedifolia* A.G. Miller 2004 as invalid. Therefore it was necessary to give it a new name, which is proposed here. Indeed, *Portulaca sedifolia* represents a different species, found in French Guyana and in Guyana but not in Socotra (see material of Kew herbarium).

When I found it, I thought at once about a *Monanthes*; although when I saw the capsule, I thought it was an *Anacampseros*, then I identified it as a *Portulaca* by naming the plant *P. monanthoides*.



Portulaca monanthoides, Heger Meheni, Socotra. © J.L. left, herbarium specimen (courtesy of Diego Rivera).



Herbarium specimen of *Portulaca sedifolia* N.E. Brown 1894. © Courtesy of Kew Botanical Garden herbarium.

Euphorbia mtolohensis J.Lodé 2013 spec. nova (Euphorbiaceae)

Description: succulent small shrub, branching, forming dense cushions up to 50 cm high and up to 150 cm wide. Small erect cylindrical and unarmed stems, 6-9 mm in diameter, greyish to greyish brown, with tip rounded. Cyathia sessile, solitary, at or near stem tips. Cyathia glands 5, pale green. Capsules erected, dark purple, on a very short pedicel.

Euphorbia schimperi Presley *similis sed habitu humiliter et compactum, cyathiis pallido viridibus solitaris, capsula purpura.*

Type: Socotra (Yemen). *E. mtolohensis* lives on Jabal Mtoloh (hence its name), located West of the island, we find it between 350 and 650 m in altitude, between calcareous rocks, in cracks.

Joël Lodé & Mildred Canales, April, 2013, JL2013-03 (holotype: UMH, herbarium sheet 2012).



EUPHORBIACEAE
Euphorbia mtolohensis sp. nova J. Lodé 2013 (holotipo: rama, bracteas)
JL2013-03
Jabal di Mtoloh (Socotra) 3 de abril del 2013



UNIVERSITAT UMH Miguel Hernández	HERBARIO UMH
	Escuela Politécnica Superior Orihuela (Alicante, España)
	Número de Registro: 2.042
	Taxon: <i>Euphorbia mtolohensis</i> J. Lodé HOLOTIPO
	Familia: Euphorbiaceae
	Localidad: Jabal di Mtoloh (Socotra, Yemen)
	Fecha: 3 de abril de 2013
	Habitat: Roquedos soleados
Recolector/es: Joel Lodé	
Nº Exsicata: JL2013-03	



Euphorbia mtolohensis, Jabal di Mtoloh, Socotra. © J.L. left, herbarium specimen (courtesy of Diego Rivera).



Euphorbia schimperi, Socotra.



© J.L.



Euphorbia arbuscula Socotra.



© J.L.



Euphorbia arbuscula var. *montana*, Tahour, Socotra.



© J.L.



Euphorbia mtolohensis, Jabal di Mtoloh, Socotra.



© J.L.



Commiphora planifrons (left) and ***Euphorbia marie-cladieae*** (right), Heger Meheni, Socotra (above, left, closeup of cyathium). © J.L.



Mildred posing with ***Euphorbia marie-cladieae***, Heger Meheni, Socotra.

© J.L.

Comments: at a first sight, this species looks like *E. schimperi*, in fact I thought it was the same one, but *E. schimperi* has a lax habit with long stems, its cyathias and its capsules are grouped in umbels and there are of different colours (greenish yellow). Without describing it, but showing the plant in photo (Ethnoflora of the Soqotra Archipelago, p. 261), Miller and Morris compare it with the treelike species *Euphorbia arbuscula*. However, this last one has cyathia in umbels, and capsules are of a khaki green. It seems that they made the confusion with *E. arbuscula* var. *montana*, which is smaller than the type species, although it may reach 2 m and more in height, and which has flattened stems (see photo), not the case with *E. mtolohensis*. Thus, *E. mtolohensis* has nothing to do with either of these both and can be described as a new species.

Euphorbia marie-cladieae A.Rzepecky 2013 (Euphorbiaceae)

Here is a spectacular species discovered during my journey of July, 2012 by Alain Rzepecky, but whose complete description you will find in the *American Journal of Cactus and Succulent* of January, 2013, while this one was foreseen to be in the October issue of *Cactus-Adventures*...

Anecdote: I do not have the habit to be accompanied in my journeys, except some time by my wife, but last year, I made an exception for Alain Rzepecky, for whom I was able to obtain for him after my own recommendation, a visa that he was not able to get with the Yemen Embassy in Paris. Within a short week, he discovered what I know of Socotra for more than five years. I had some parts of the island still to investigate, in particular the southwest where I think that we can discover new locations for known species, including discovering new species, why not?

I thus decided to go on Heger Meheni, whose name I did not know then, but which was, in my opinion a place to investigate. This journey would be a good opportunity. Regrettably for me, halfway through the ascent, my heart problems did not allow me to climb more, I took refuge in the shade of a cliff, and Alain Rzepecky continued. On the way back, he showed to me some material he had taken, as well as photos of an euphorbia, the novelty and the interest of which I discovered at once.

In front of this important discovery, the plans were changed, and the next day, we returned at the same place, hoping that I could rise up to the euphorbia; regrettably, again, I found myself without the forces to get there. The way was too steep for my too fragile health. It did not matter, Alain was going to describe and to publish his taxon in my journal, obviously, because he travelled with the editor. But as he wrote to me few weeks after our return, Suzanne Carter tried to convince me to publish in *Euphorbia World*.

In spite of all my attempts to publish with much legitimacy the taxon in *Cactus-Adventures International*, which moreover would allow to present the new species in a journal published in three languages, and thus able to share with a maximum of English-speaking readers, two days before closing the edition, Alain said to me that he would not publish in my journal! And this is how the article was finally found in the American journal. Suzanne Carter, whom I have known for a long time, after all refused to publish it for ethical reasons, but in fact, I do not know what happened with her.

Naturally, it was his own choice to publish somewhere else, although a late and in my



Euphorbia marie-cladieae, Heger Meheni, Socotra.

© Mildred Canales.

opinion an unfair choice. And although our friend, who, according to his own terms “has to be known”, has all of a discoverer’s quality, it is certainly the only quality he gave me evidence!

Since, I returned to Socotra, with Mili, we studied an easier way to climb, with the help of my faithful guide Ahmed, and so we could finally make you admire this magnificent new species of Socotra, the story of the discovery, and its description of which will stay for the record.

Text J.L. & M. Canales, Photos: J.L.

THANKS

I would here like to thank the University of Murcia and more particularly Diego Rivera for the academic and financial help brought to the realization of botanical missions of investigation on Palm trees in Yemen and Socotra.

Also, I would to thank his Excellence the Ambassador of Yemen in Madrid, Mustapha Ahmed Noma for his extreme kindness and the quick measures to obtain our visa, as well as his Excellence the Ambassador of Yemen in Paris for authorizing the entrance in Yemen of Alain Rzepecky.

Finally, I thank my guide and translator Ahmed Saleh, for his extreme competence and kindness throughout the seven expeditions organized in his company, as well as my driver, Abdul Wahid, cheerful and efficient in any circumstances.

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