

The *Sedum morganianum* habitat discovered

Miguel Cházaro, David Jimeno-Sevilla, & Amparo Alvalat-Botana

Since its first appearance in cultivation, the habitat location of *Sedum morganianum* has remained unknown – until today. Photography by the authors, except where stated.

S*edum* is a genus of about 280 species in the northern hemisphere (North America, Europe and Asia), and of some 100 species of *Sedum* reported by Stephenson (1994) for Mexico, *Sedum morganianum* is, without doubt, the best known and most widespread in cultivation.

Sedum morganianum is a perennial, pendent plant with many long hanging stems up to 90–100cm long, covered with pale glaucous green, slightly flattened, very fleshy leaves, mostly about 2cm long and 5–8mm thick. The flowers are borne terminally, in pendent corymbs of up to 6 flowers at the ends of the longest branches, with 1–6 flowers, purplish pink in colour (Fig. 1).

It has been 76 years since the introduction (1935) of *S. morganianum* to cultivation and 73 years since its first description by Eric Walther (1938). Now, finally, the mystery of where the famous Burro's Tail or Donkey's Tail actually occurs in the wild has been solved. It was a sheer accident that we stumbled across it in two ravines of the ranch Bellreguard of Sochiapa, in central Veracruz, eastern Mexico (Fig. 2).

Although this discovery has already been reported in Spanish (Jimeno-Sevilla et al., 2010), it is of such importance that we now reveal this again for the benefit of English readers.



Fig. 1 *Sedum morganianum* in cultivation (Photo: Ray Stephenson)





It is related to *Sedum burrito* which has smaller and more spherical leaves, but also of a similar pale bluish-green colour. Both species come from the more tropical regions of southern Mexico (Fig.3).

Clausen (1959) stated: "*Sedum morganianum* Walther, Distribution: unknown, Type locality: unknown, the type being a cultivated plant of unknown origin in the wild. This species, known popularly in Mexico as Cola de Borrego or Cola de Burro, is particularly common in cultivation in Veracruz in the region of Jalapa to Coscomatepec and Orizaba. A search in the wild in 1955 for it in this area was unsuccessful.

The Burro's Tail is an extremely popular plant for hanging baskets. However, growing perfect specimens can be quite an achievement, since the beautiful, pale green leaves detach themselves at the slightest touch. Fortunately each detached leaf regenerates easily to produce new plants. Its pendent habit of growth, hanging vertically, makes it a very choice basket plant for the garden, greenhouse or windowsill.

Fig. 2 (previous page, top) Mayatla ravine at Bellreguard of Sochiapa Ranch, Veracruz, Mexico. Now revealed to be the original habitat of *Sedum morganianum*

Fig. 3 (previous page, bottom) Comparison of *Sedum morganianum* with the related *S. burrito*. The latter is the centre branch with smaller, shorter and bluish leaves (Photo: Ray Stephenson)

Figs. 4 (above), 5 (right) and 6-7 (following pages) *Sedum morganianum* in the wild. The hanging stems are ideally suited to growing on these vertical cliffs





Fig. 6

Likewise I did not find it on the slopes of the Cofre de Perote volcano”.

As stated by Mitich (1993): “*Sedum morganianum* is one of the few cultivated plants whose native habitat is still unknown”.

Uhl (1980) pointed out that “ *Sedum morganianum* Walther, the Donkey’s Tail, has $n = 35$ chromosomes in three collections, all from cultivation and possibly all the same clone, but including one traceable back to the type collection. The species is popular and very widely cultivated in Mexico and elsewhere, but no definite

locality is known for it in the wild. Rumours of possible wild populations near the eastern slopes of the Peak of Orizaba by Moran (1977) have not yet been confirmed”.

Also Stephenson (1994) wrote: “The habitat of this stonecrop is still unknown, despite the fact it has been in cultivation since 1935. It is commonly cultivated and has frequently escaped in Mexico. It is assumed it may be wild near the Peak of Orizaba”.

Sedum morganianum was not recorded as a wild species in Veracruz State by Meyran (1987), by Chazaro (1990), nor by Sosa & Gomez-Pompa (1994), where 12 other species are known.

S. morganianum and the closely related *S. burrito* were both found for the first time at plant nurseries in Coatepec, Veracruz, in the central part of that state, firstly by Eric Walther in 1935 and the second by Reid Moran in 1975. Logic indicates that this would be a good place to look for it as a wild plant in the ravines near this town, towards the windward slopes of volcano Cofre de Perote. The senior author had searched in vain for several years, spending many days of his vacations searching in these ravines without success, and had given up hope. It came as a surprise to find it eventually so far away from Coatepec.

Uhl (1992) presaged its discovery with the following words. “I have heard that a nurseryman claims to have seen the species [*S. morganianum*] hanging from cliffs in a canyon somewhere near the flanks of the immense peak (Volcano) of Orizaba (5700m) in eastern Mexico, and who is said not to have collected it because he was already growing it back home. This area is not far from Coatepec, where Walther first encountered it, a region of many canyons, some of them very difficult of access. So I think sooner or later somebody is going to discover *S. morganianum* in the wild thereabouts. I collected *Sedum nussbaumerianum* in this same



general area in 1978, discovered for the first time since its type was collected by C A Purpus in 1907. Clausen had looked hard for it, unsuccessfully, but more recently Miguel Cházaro has found it at several other localities in the same vicinity”.

In fact the ravines of Mayatla and Ixcacotitla at Bellreguard ranch are remote and very difficult to access. In February 2008, David Jimeno and Amparo Alvalat were doing a floristic study at Bellreguard Ranch. As they approached the rim of a canyon, Carlos Ros, the owner of this deer-hunting place, told them that a rare plant grew here on his 1200-acre property and pointed out the Burro’s Tail on the huge cliffs. Carlos Ros had himself had this plant pointed out when a zoologist had visited his ranch some months earlier and spotted the plants (Figs. 4–7).

On the rocky cliffs of these two ravines there is a rich succulent flora, including *Mammillaria sartorii*, *Selenicereus coniflorus*, *Echeveria carnicolor*, *Sedum nussbaumerianum*, *S. hemsleyanum*, *Beaucarnea recurvata*, *Opuntia decumbens*, *Hechtia myriantha*, *H. purpusii*, *Tillandsia grandis*, and *Agave pendula*, among others.

In a visual inspection Carlos Ros has noted that the Burro’s Tail grows only in an altitudinal range of 600

to 700m along the cliffs of the two ravines in which it occurs.

Voucher specimens, with flowers, were collected as follows:

Mexico, Veracruz, Tenampa County, Mayatla ravine at Bellreguard of Sochiapa Ranch; growing on rocky cliffs in tropical deciduous forest, alt. 700m; February 2008, D. JIMENO S., A. ALVALAT-BOTANA & Carlos ROS 425 (IEB, MEXU, XAL). Walther’s original holotype is at CAS.

The story of how Eric Walther first found this plant was related by Mitich (1993).

In 1935, Eric Walther, a botanist at Golden Gate Park, San Francisco, was travelling through Mexico’s state of Veracruz seeking new echeverias. While he was waiting for his guide in Coatepec, a small town near Jalapa and the centre of the local coffee-growing district, a very aggressive lady literally dragged him into the sales yard of Jardin Flotante, a small nursery owned by her father. Walther was presented with an amazing sight of numerous pale green succulents with pendent metre-long tails growing in numerous tin cans attached to the walls which nearly concealed the house (Fig. 8). He purchased several of the unknown plants and later



Fig. 8 Protologue photos of the nursery where Eric Walther first encountered *Sedum morganianum* in 1935 (Photos: Eric Walther)

that day also saw them growing in cans under the eaves of a coffee planter's shack and again in Banderilla's renowned gardens. Walther was unable to find any information about the plant's natural habitat or its flowering characteristics. Indeed, he had no idea to which genus it belonged. Some three years later, Dr Meredith Morgan Sr, a hobbyist and expert grower from Richmond, California, flowered the plants in his garden. It has pink flowers that appear from the tips of the long branches. This enabled Walther to complete a description of the new species, which he named *Sedum morganianum* in honour of Dr Morgan.

There are several other *Crassulaceae* species that were described only from cultivated plants of unknown origin and have still not yet been found in habitat including:

Graptopetalum paraguayense ssp. *paraguayense* (N.E.Br.) E. Walther;

Echeveria prolifica Moran & J. Meyrán;

Sedum mexicanum Britton;

Sedum orbatum J. Meyrán and

Sedum burrito Moran.

ACKNOWLEDGMENTS:

Thanks are due to Carlos Ros, the owner of Bellreguard de Sochiapa Ranch, for directing us to where Burro's Tail grew on the cliffs of ravines on his ranch.

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Miguel J Cházaro
Dept de Geografía, CUCSH, Universidad de Guadalajara,
Jalisco, Mexico
& Facultad de Biología, Universidad Veracruzana, Xalapa,
Veracruz, Mexico
Email:chazaro55@hotmail.com

David Jimeno-Sevilla
Centro de Investigaciones Tropicales (CITRO), Universidad
Veracruzana, Xalapa, Veracruz, Mexico
Email: bdpjimeno@yahoo.com.mx

Amparo Alvalat-Botana
DIPRO, Universidad Veracruzana, Xalapa, Veracruz, Mexico
Email: amparoalbalat@hotmail.com

Layout by David Quail