

# notes on sedum fuscum



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**S**edum fuscum localities had been known only from Sierra de San Miguelito, an igneous mountain range, since its discovery in 1880 by Parry & Palmer col. N°235, in the state of San Luis Potosí (SLP), and found ever since in several places around the shrub-oak vegetation all over the “Sierra”, on the canyon wall crevices where it shares habitat with *Pinguicula macrophylla* and *Pachyphytum hookerii*. It also grows on denudated slopes where it shares habitat with *Phemeranthus humilis* and several cacti such as *Mammillaria bocasana* subsp. *eschauzieri*, *Mammillaria densispina* and *Coryphantha clavata* subsp. *stipitata*, and other succulents such as *Echeveria agavoides*, *Sedum moranense* and also an endemic grass species belonging to a monophyletic genus, *Schaffnerella gracilis*. (Collect n°: C.C. Parry & Ed. Palmer: 235 (KEW))

The taxon is found between 2000 to 2800 meters above sea level on this so called shrub-oak type of vegetation composed mainly of *Quercus microphylla*, *Q. eduardii*, *Q. tinkhamii*,

*Sedum fuscum* in its first vegetation year with the xerophitic lichen *Asphylostridium coronatum* - Paseo de Los Perros Gordos, Zacatecas, Mexico.







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1 & 2 · *S. fuscum* in its second vegetation year. 3 · *S. fuscum*, flowering two years after germination. Arroyo los Palillos, SLP. 4 · *S. fuscum* - area Mineralizada la Blanca SSM SLP2. 5 · Flowering *S. fuscum* growing under xeric oaks *Quercus potosina* in Arroyo San Antonio, SLP. 6 · *S. fuscum* growing in shade, protected by a rock. Cerro la Zorra, SLP.

*Arbutus xalapensis* and *Arctostaphylos pungens*.  
The taxon presents different distinct morphologies along its one-to-two year life span; at its juvenile stage, it displays a peculiar clumpy form, but when the reproductive stage begins, the plant starts to elongate over four times its

original size and distributing at the same time its oval shaped leaves on the entire pedicel and ramifications of the plant; the flowers bloom on the tip of these little branches. The plant dies right after the fructification stage when the seeds are falling to the ground and become ready for





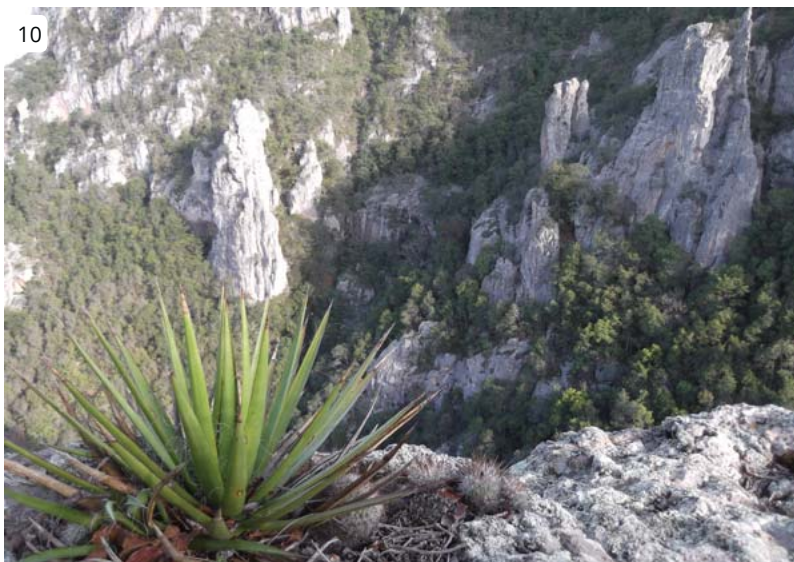
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7 · A large colony of flowering plants, Cerro Colorado, SLP. 8 & 9 · *S. fuscum* - seedlings. 10 · Panoramic view of the habitat with *Agave filifera* subsp. *schidigera*, Cerro la Mesa Redonda. 11 · Panoramic view of the habitat. 12 · Associated flora, *Lennoa madreporoides*, a parasite of oak tree roots.

the next rainy season in order to germinate.

In 2004, Juan Martínez Cruz and Oswaldo Tellez Valdez published in their work "*Listado Florístico de la Sierra de Santa Rosa, Guanajuato (GTO), México.*" a new locality for *Sedum fuscum* in this Sierra, where the ecological conditions are quite the same as the type's, vegetation and substrate

wise, on igneous ranges. (collect n°: J. Martínez: 819; M. Cano: 19, 141)

In 2004 Mollie Harker et al, in their work "*Catálogo de las plantas vasculares del municipio de Encarnación Díaz, Jalisco (JAL), México*" reported another new locality for *Sedum fuscum* on an oak-forest vegetation type and reported it as a very





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13 · Mammillaria bocasana ssp. eschauzieri shares the habitat with this minuscule Sedum. 14 · Mammillaria densispina - SSM. 3 · Stenocactus och - SSM. 15 · Echeveria agavoides. 16 · Pachyphytum hookerii. 17 · Sedum fuscum - a beautiful flowering plant.

rare rupicolous plant **(1)** (collect n°: M. Harker y M. Riojas-L.: 1461).

These last two localities for *Sedum fuscum* widen significantly the distribution area far beyond the borders of the state of SLP into the states of GTO and JAL. This represents a new area for its potential distribution, covering about 7000km<sup>2</sup>

which include 1100km<sup>2</sup> of suitable habitat, and highlights a new phenomenon, unknown to this taxon, namely its sympatric distribution pattern, as shown in the map. The gap between the populations (40 to 100km) is much too big and cross pollination between plants from different populations becomes virtually impossible.





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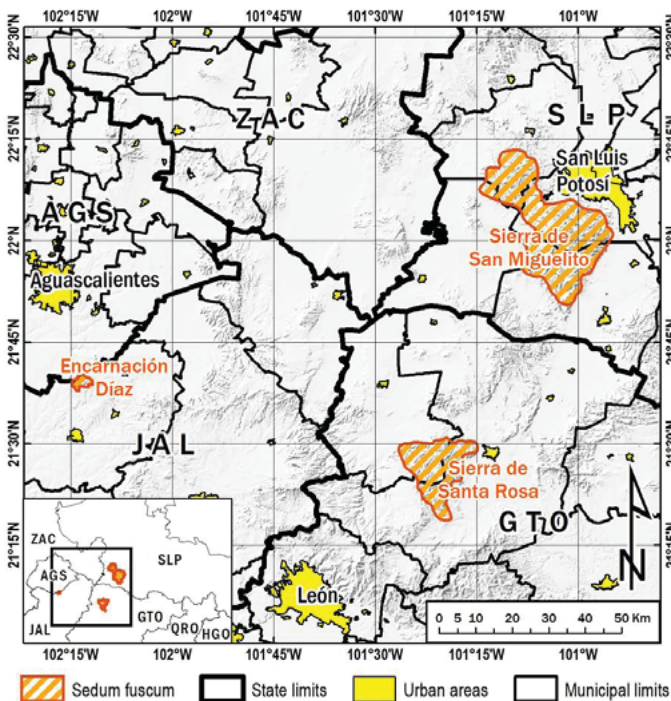


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*Sedum fuscum* distribution map - made especially for *Xerophilia* by Mr. Miguel Angel Gonzalez Botello, from Guadalupe, NL, Mexico, President of the "Sociedad de Cactáceas y Suculentas del Estado de Nuevo León"



19 · *Euphorbia radians*, quite rare in these areas. 20 · *PheMERANTHUS HUMILIS*, an allopatric species - area Mineraliza. 21 · *Pinguicula macrophylla* - a carnivorous plant that grows on few sites in the sierra.

**Literature**

**Juan Martínez Cruz, Oswaldo Téllez-Valdés,** Listado florístico de la Sierra de Santa Rosa, Guanajuato, México. Boletín de la Sociedad Botánica de México, núm. 74, junio, 2004, pp. 31-49, Sociedad Botánica de México, México

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**Pablo Carrillo-Reyes,** 2009, Molecular phylogeny of the Acre clade (Crassulaceae): Dealing with the lack of definitions for *Echeveria* and *Sedum*, Molecular Phylogenetics and Evolution 53 (2009) 267–276.

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**Editor's Note**

(1) The term rupicolous refers a plant growing usually among rocks.