Type: MEXICO. Veracruz, Mun. Emiliano Zapata, parte alta de la cascada de Cerro Gordo, 19°26'55"N, 96°41'13"W, 420 m, 4 Nov 2007, *P. Carrillo-Reyes & D. Cabrera-Toledo 5245*. (Holotype IEB; isotype XAL)

Paratypes: MEXICO, Veracruz, Mun. Actopan, 5 km al N de Mozomboa, 11 Nov 1996, *G. Castillo et al. 16067* (XAL); Mun. Actopan, Sierra de Manuel Díaz, 19°32'36"N, 96°26'17"W, 1 Apr 1998, *G. Castillo et al. 17560* (XAL); Mun. Actopan, La Raja del Chalahuite, base del Cerro Manuel Díaz, 150 m, 29 Dec 1995, *M. Cházaro et al. 7595* (IBUG, IEB, XAL); Mun. Comapa, Barranca de Panoaya, entre Dos Caminos y Tlacotepec de Mejía, 500 m, 1 Jun 1993, *M. Cházaro & P. Acevedo 7051* (IBUG, MEXU); Mun. Emiliano Zapata, camino de Cerro Gordo hacia Xoltepec, pasando el río, 19°27'10"N, 96°41'23"W, 26 Oct 2008, *D. Jimeno et al. 509* (XAL); Mun. Emiliano Zapata, A 20 m al N de la carretera entre Cerro Gordo y Plan del Río, sobre afloramientos rocosos, 19°25'24.06"N, 96°40'42.95"W, 513 m, 20 Oct 2010, *D. Jimeno & R. Castro 1335* (IEB, MEXU, XAL); Mun. Emiliano Zapata, La Cañada, al NW del Poblado de Plan del Río, 19°25'05"N, 96°39'08"W, 364 m, 12 Aug 2007, *D. Jimeno & A. Alhalat 418* (XAL). Mpio Jalcomulco, 1.5 km al NW de Jalcomulco, 19°20'9"N, 96°46'29"W, 17 Jun 1993, *G. Castillo et al. 17889* (XAL); Mun. Paso de Ovejas, Baños sulfurosos cerca de Acazónica, cañada cercana al río, 300 m, 20 Nov 1991, *H. Oliva & F. Ramón 1000* (CORU, MEXU) *idem*, 25 Oct 2007, *D Jimeno & A. Alhalat 420* (XAL); Mun. Puente Nacional, Rinconada, 60 m, 12 Jun 1973, *R. Hernández y J. Dorantes 1782* (F, XAL); Mun. Puente Nacional, Tamarindo, sobre peñas, 100 m, 7 Dec 1979, *F. Ventura 16662* (CAS, MEXU); Mun. Puente Nacional, barranca de Santa María Tetetla, 600 m, 30 Dec 1986, *M. Cházaro et al. 4345* (IBUG, XAL); Mun. Puente Nacional, 2 km al SE de Camaroncillo, cerca del nacimiento de agua de azufre,19°13'N, 96°41'W, 325 m, 11 Dec 1985, *M.E. Medina & M. Ortiz 725* (XAL); Mun. Puente Nacional, Chichicaxtle, 50 m, 10 Dec 1976, *F. Ventura 13727* (MEXU); Mun. Tenampa, Barranca de Mayatla, Rancho Beleguard de Sochiapa, 19°16'58"N, 96°48'44"W, 26 Apr 2008, *D. Jimeno & A. Alhalat 443* (XAL); Mun. Tesocelo, 1 km al S de Llano Grande, 19°21'37"N, 96°53'3"W, 24 Jun 1998, *G. Castillo, S. Avendaño & R. Palestina 17997* (XAL); Mun. Tlaltetela, Barranca de Xopilapa, vereda de Buena Vista a Xopilapa, 19°17'17"N, 96°46'49"W, 19 Oct 2008, *D. Jimeno & M. Cházaro 459* (XAL).

Perennial herb, rosettes, bracts and sepals sparsely pubescent, pubescence of hyaline hairs 0.15–0.20 mm long. Rosettes sessile or nearly so, densely arranged at the base. **Leaves** 10–40, rosulate, crowded, spiraled, deltoid when young, obovate to spathulate at maturity, 9–13 mm long, 4–6 mm wide and ca. 2.7 mm thick, apex rounded, papillose. **Floriferous stems** erect or decumbent, 6–39 cm long, 2–6 mm in diameter at the base, glabrous, non-papillose. In-

Sedum jarocho P. Carrillo & Jiménez-Sevilla sp. nov. (Figs. 4, 5, 6)

Planta herbacea perennis,succulenta, diffusae pubescens, trichomate triangularis ad 0.15–0.2 mm longa, rosulae folia 10–40 laxae disposita vel spiraliter, obovatio vel spathulatibae, 9–13 mm longis, inflorescencia paniculata ad 29 cm longis, erectis vel decumbentis, ramis 4–7 late divaricatis ad 8.8 cm longis, 3 ad 11 flores habent, flores sessiles vel subsessiles, petalae (4)5, alba, 3.5–4.0 mm longa, carpella 5, glabra, 3.2–4.0 mm longa, ad basem carnata, Taxon norosus ad sectio Sedastrum *pertinens*; S. hemsleyanum *DC. affinis*.

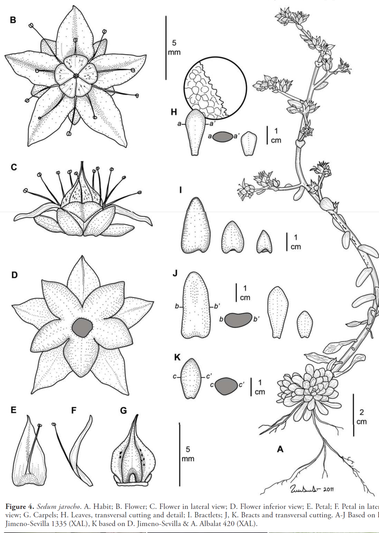

Figure 4. *Sedum jarocho*. A. Habit; B. Flower; C. Flower in lateral view; D. Flower inferior view; E. Petal; F. Petal in lateral view; G. Carpels: H. Leaves, transversal cutting and detail; I. Bracteis; J, K. Bracts and transversal cutting. A-J Based on D. Jimeno-Sevilla 1335 (XAL), K based on D. Jimeno-Sevilla & A. Alhalat 420 (XAL).

florescence a paniele, peduncle 4.9–29 cm long with 4–14 secondary thyrsoid branches, to 8.8 cm long, each branch with 3–8(–11) flowers in cincinni to 35 mm long; bracts oblong-lanceolate, spathulate or elliptic, 1.9–26.5 mm long, 1.2–11.4 mm wide and 4–7 mm thick; bractlets deltoid, ovate to ovate-lanceolate, 0.7–1.5 mm long, 0.8 mm wide and 5–8 mm thick. **Flowers** sessile to subsessile, pedicel ca. 1.5 mm long, 0.7 mm in diameter, with a fetid odor; calyx with (4–)5 subequal lobes, the lobes deltate, triangular, to ovate or elliptic, 2.0–3.7 mm long, 1.8–2.7 mm wide at the base, apex obtuse; **corolla** glabrous, with (4–)5 free white to greenish white petals, these ovate to lanceolate, 3.5–6.5 mm long, ca. 2.9–4.0 mm wide in the widest part; **stamens** (8–)10, glabrous, (4–)5 of them opposite and adnate to the petals (at 1.2 mm above the base of the petals), 3.8 mm long, the other (4–)5 stamens alternate to the petals, 5.0–5.4 mm long; filaments white; anthers pinkish when predehiscent, suborbicular, 0.4 mm long, ca. 0.5 mm wide, pollen yellow; nectaries lanceolate, ca. 0.5–0.9 mm long, 0.3 mm wide, carpels glabrous, vesiculose, whitish green with reddish dots, 3.2–4.5 mm long including the style, with a concavity at the base where nectarial scale is placed, styles 1.1–1.5 mm long, terete. **Follicles** containing numerous seeds. Seeds 0.45–0.5 mm long, ca. 0.2 mm wide, reddish brown.

Distribution. *Sedum jarocho* is endemic to the canyons of the eastern slopes at the end of the Trans-Volcanic Belt in the central part of the state of Veracruz (Fig. 6). It occurs at elevations from 50 to 800 m in volcanic outcrops in tropical deciduous forest. This habitat has a high floristic diversity with a noticeable representation of succulent plants. *S. jarocho* occurs mostly on rocky sites with difficult access, which has helped to maintain the species relatively well preserved. (Castillo-Campos et al. 2007). Some floristic elements of the localities where *S. jarocho* occurs are: *Agave*, *Combretum*, *Comocladia*, *Croton*, *Dioon edule* Lindl., *Eugenia hyperpyrea* Standl. *Euphorbia calcarata* (Schltdl.) V.W. Steinm., *Hechtia myriantha* Mez, *Mammillaria sartorii* J.A. Purpus, *Neobuchaunia*, *Plumeria rubra* L., and *Ruprechtia chiapensis* Lundell, *Yucca*.

Phenology. Flowering from October to January. Fruiting from December to March.

Etymology: The specific epithet *jarocho* has an unknown origin; apparently it comes from old Spanish and was used during colonial times to refer to people of black ancestry. Today, it is proudly used to designate persons, items, and music from the state of Veracruz (Aguirre-Beltrán 1989).

Based on the presence of dense basal rosettes, stems dying back after flowering, paniculate inflorescences, and flowers with very thin white petals and a nectarial concavity in the base of each carpel, *Sedum jarocho* is clearly a member of section *Sedastrum* (Clausen 1943; Uhl 1992). This section contains about six species (Pérez-Calix 1998; Carrillo-Reyes & Lomeli-Sención 2008). Although *Sedum jarocho* has not yet been included in any phylogenetic analysis, based on its morphological features, its closest relative seems to be *S. hemsleyanum* DC., with which it shares many morphological characters and with which it has been largely confused. In fact, J.N. Rose realized differences between the two taxa and attempted to publish it as a distinct species (Clausen 1959: 234), but apparently he did not. Among the shared characters of *Sedum jarocho* and *S. hemsleyanum*, are the small size of the rosettes and the erect to decumbent inflorescences with narrow bracts. However, *S. jarocho* can be separated by its glabrous inflorescences and its spathulate leaves. Additionally, those species are geographically and ecologically separated: *Sedum jarocho* occurs only in the state of Veracruz, on cliffs in tropical deciduous forest ranging from 50 to 800 m, while *S. hemsleyanum* is widely distributed in central and Southern Mexico along the Trans-Mexican Volcanic Belt and the Sierra Madre del Sur (Fig. 6). *S. hemsleyanum* grows in tropical deciduous forests and xerophytic scrubs at elevations from 1150 to 2350 m (Clausen 1943) (Table 2). In the state of Veracruz, *S. hemsleyanum* is known only from the regions of Orizaba and Perote and is not sympatric in any locality with the new species. In Appendix 1 a selected list of examined specimens of *Sedum hemsleyanum* used for morphological comparison is given.

Figure 5. *Sedum jarocho*. A. Habit; B. Rosette; C. Bud; D. Detail of inflorescence; E. Detail of peduncle; F. Flower; G. Detail of young leaves showing the pubescence. All photos by D. Jimeno-Sevilla except B by P. Carrillo-Reyes.

	S. jarocho	*S. hemsleyanum*
Shape of leaves	obovate to spathulate	oblanceolate to obovate
Floral stems	glabrous	papillose
Shape of bracts	oblong-lanceolate, spathulate or elliptic	oblanceolate
Vegetation type	tropical deciduous forest	xerophytic scrub and tropical deciduous forest
Altitude (m)	50–800	1150–2350

Table 2. Comparative table of distinctive characters between *Sedum jarocho* and *S. hemsleyanum*.

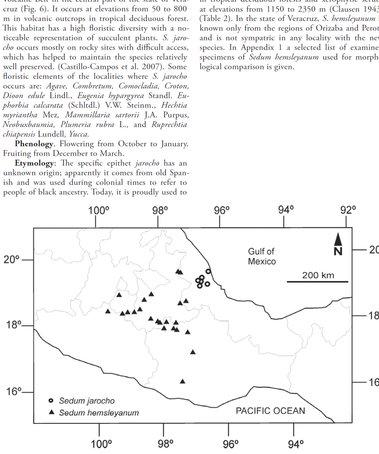

Figure 6. Distribution of *Sedum jarocho* and *S. hemsleyanum*.