

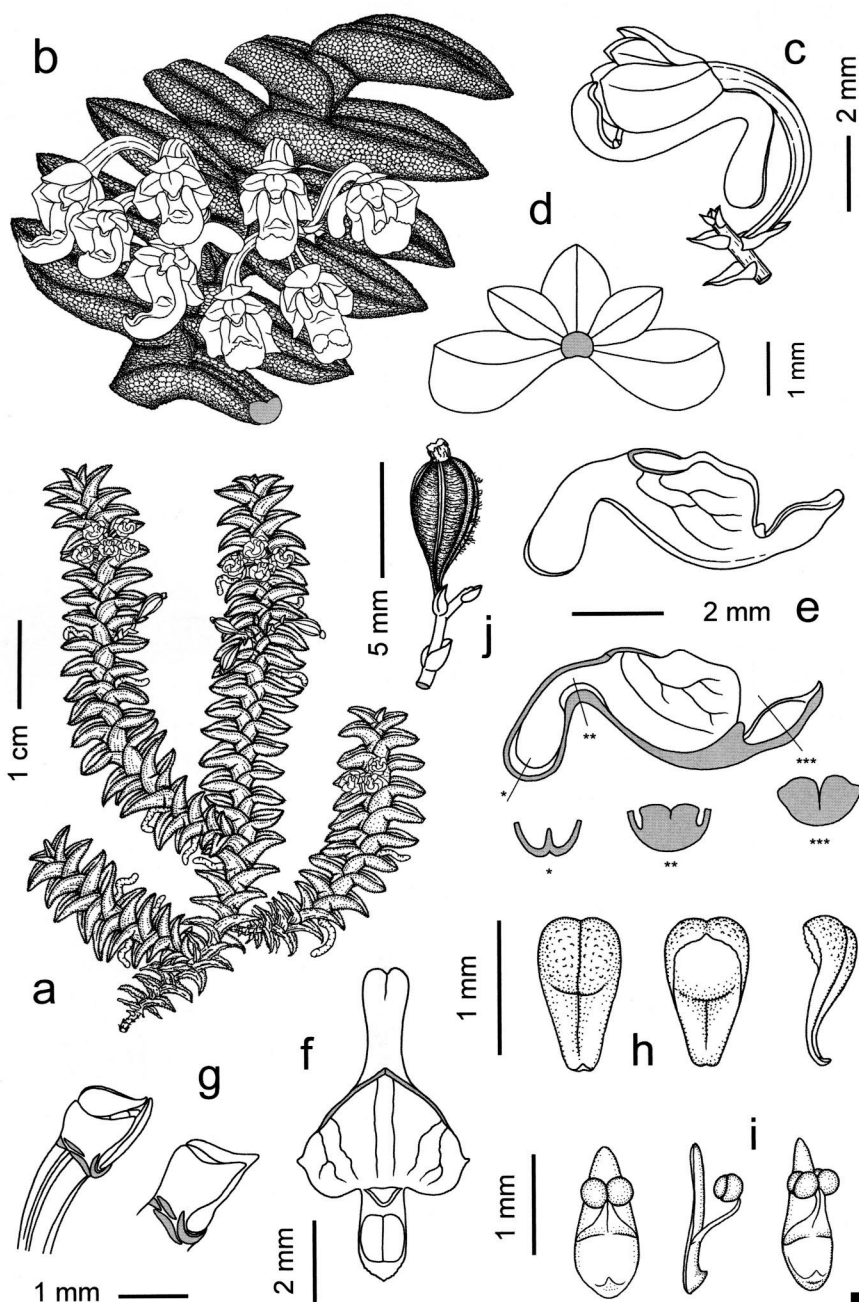
***Schoenorchis scolopendria* Aver.,  
*sp. nov.***

Planta epiphytica repens. Caulis 3–6 cm longus, simplex, arcte substrato appressus. Folia disticha, succulenta, anguste ovoidea, 3–8 mm longa, 2–3 mm lata, acuta ad obtusa. Inflorescentia 2–4 mm longa, 1–4(6)-flora. Flores 2–4 mm in diametro, dilute purpureo-violacei, carnosii. Sepalum dorsale late ovatum, 1.5–2 mm longum, 1.2–1.8 mm latum. Sepala lateralia obpyriformia, obliquissima, 2.5–3 mm longa, 1.4–1.8 mm lata. Petala elliptica, 1.5–2 mm longa, 1–1.2 mm lata. Labellum 3.5–4.5 mm longum, 3–4 mm latum, trilobatum, centro callo conico, basi saccatum; lobi laterales erecti, subquadrati, 1 mm longi; lobus medius elongatus, 2.5–3 mm longus, 1–1.5 mm latus, apice subacutus sursum flexus, callis carnosus magnis duobus. Saccus e labello dextrorsum directus, 2.5–3 mm longus, 1–1.2 mm latus, indistincte bifidus. Columna 1 mm longa, antice in processus alatos triangulares acutos antrorsos duos producta.

**TYPE** Northern Vietnam, Thanh Hoa prov., Ba Thuoc distr., Co Lung municipality, territory of Pu Luong protected area, near Co Lung village (20°27'28"N, 105°12'18"E), 17 April 2001, *N.T.Hiep, L.Averyanov, N.T.Vinh, D.T.Doan, HAL 1084* (HN, LE).

**PARATYPES** Northwestern Vietnam, Son La Prov., Quynh Nhai Distr., Muong Chien Community, Muong Chien village, 600–900 m, around point 21°50'50"N, 103°32'10"E, 30 November 2007, *P.K.Loc, N.T.Vinh, HAL 11292* (HN, LE-photo). NW. Vietnam, Son La Prov., May–Jun. 2010, *P.K.Loc, NMD 101* (CPC Herbarium, LE). NW. Vietnam, Son La Prov., Son La City, Chieng Co Municipality, around point 21°18'24"N 103°52'53"E, 20 December 2010, *L.Averyanov, P.K.Loc, P.V.The, N.T.Vinh, CPC 1139* (CPC Herbarium, LE).

**DESCRIPTION** Monopodial epiphyte with creeping, plagiotropic, unbranched stems densely adpressed to bark of host tree. Stem 3–6 cm long, densely covered throughout with overlapping distichous leaves, in lower part with few short thick flexuose roots arising ventrally from leaf axils. Leaves arranged in two rows, green to dull purple-violet, thick, succulent, narrowly ovoid, 5–8 mm long, 2–3 mm in diam., more or less distinctly canaliculate above, sometimes indistinctly keeled below, cordate in cross-section, acute to obtuse, with finely alveolate-cancellate surface, broadening at the base into closed overlapping sheaths enveloping the stem; old leaves shrunken, conduplicate. Inflorescence arising from leaf axil, 2–4 mm long, bearing 1–2 short, ovate or triangular, obtuse sterile bracts and 1–4(6) flowers. Floral bracts small, triangular to ovate, obtuse or acute, 0.5–1 mm long. Pedicel and ovary 3–5 mm long, curved, green to dull



*Schoenorchis scoropendaria* Aver. HAL 1084

[12] *Schoenorchis scolopendria*. a. flowering plant; b. portion of stem with inflorescences; c. flower, side view; d. flattened sepals and petals; e. lip, side view and sagittal section (asterisks indicate respectively cross lip sections made along black lines); f. flattened lip with partially dissected spur; g. column with and without operculum, side view; h. operculum, view from above, from below and side view; i. pollinarium, ventral, side and half-side views. All drawn from the type (HAL 1084) by L. Averyanov and T. Maisak.

brown-purple, broadening toward the apex. Flowers odorless, resupinate, not widely opening, 3–4 mm across; light purple-violet, lateral sepals darker, petals sometime nearly white, all tepals thick and fleshy. Dorsal sepal broadly ovate to almost orbicular, 1.5–2 mm long, 1.2–1.8 mm wide, round or shortly obtuse. Lateral sepals obpyriform, strongly oblique, broadening toward the apex, 2.5–3 mm long, 1.4–1.8 mm wide, shortly obtuse. Petals almost elliptic, 1.5–2 mm long, 1–1.2 mm wide, round or shortly obtuse. Lip not mobile, 3.5–4.5 mm long, 3–4 mm wide, 3-lobed, concave, with conical callus at the center, spurred at the base; side lobes erect, semiorbicular to subquadrate, 1 mm tall; midlobe

elongate, 2.5–3 mm long, 1–1.5 mm wide, with erose, upward incurved, subacute apex, in the center with 2 large fleshy swellings separated by a narrow cleft; spur white tinged purple-violet, at right angles to the lip, 2.5–3 mm long, 1–1.2 mm wide, broadening and slightly bifid at the apex; on lower surface (opposite column) near opening with a fleshy subquadrate callus, inside near the apex with a low longitudinal septum. Column white tinged violet, shortly cylindric, about 1 mm tall and broad, truncate, with almost flat clinandrium and large, triangular, acute, forward directed lateral wings, in front at the base with a round concave stigma. Operculum bright yellow, hemispherical, about 1 mm in diam., with broad, orbicular or shortly obtuse, recurved beak. Pollinarium consisting of 4 pollinia, caudicles, stipe and viscidium. Pollinia solid, yellow, hemispherical, arranged into 2 almost spherical pairs. Caudicles very small, insignificant. Stipe a simple triangular lamina attached at its broad base to the central part of the viscidium. Viscidium a thin, flat, narrowly ovate disk, very large, as long as column or longer. Fruit when dry a gray to gray-brown obovoid capsule, 5–6 mm long, 2.5–3.5 mm in diam.

**ECOLOGY** Primary and secondary broad-leaved dry evergreen forests on tops of rocky limestone mountains at elevations of 1,800–3,000 feet (550–900 m) above sea level. Creeping epiphyte on old trees (preferably on *Pistacia weinmanniifolia*).

**FLOWERING** April–June, fruits November. Very rare (EN).

**ETYMOLOGY** Species name refers to habit of the plant resembling a small centipede hiding in bark folds on shady old trees.

**DISTRIBUTION** Northern Vietnam (Thanh Hoa and Son La Provinces). Probably local endemic.

**NOTES** The plant described here was discovered more than 10 years ago, but incorrectly recorded in the orchid flora of Vietnam as *Schoenorchis seidenfadenii* Pradhan (Averyanov and Averyanova 2003) due to the resemblance of the lip, bearing two fat calluses on the midlobe; characteristic of both species. However, additional study uncovered clear differences between plant and all other known species of the genus. These differences include the elongate creeping plagiotropic stem, acute alveolate leaves and internal structure of the flower. Although its plagiotropic creeping stem is unusual for the genus, our species undoubtedly belongs to *Schoenorchis* Sect. *Pumila* Aver. (Averyanov 1994) together with such well known species as *S. brevibrachis* Seidenf., *S. fragrans* (C.S.P. Parish et Rchb.





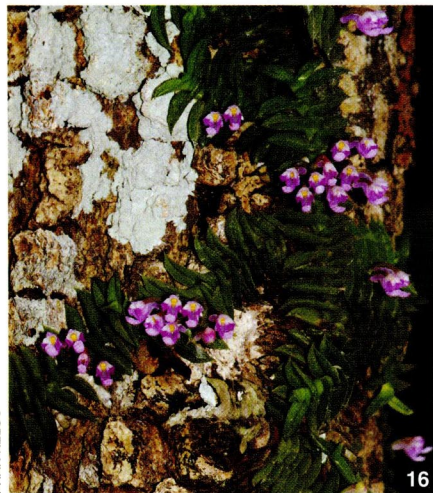
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- [13–14] Plant habit of *S. scolopendria* growing in its native habitat (CPC 1139).  
 [15] Leaves of *S. scolopendria* with their typical alveolate surface (CPC 1139).  
 [16–17] Flowering wild-collected samples of *S. scolopendria* cultivated in Hanoi (NMD 101).





18

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19

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[18–20] Flowers of *S. scolopendria* cultivated in Hanoi (NMD 101).



20

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f.) Seidenf. et Smitinand, *S. seidenfadenii* Pradhan and the still rather obscure species, *S. tixieri* (Guillaumin) Seidenf. Like all these species our novelty is fairly desirable for cultivation as an unusual miniature ornamental plant with attractive flowers. In its native area *S. scolopendria* grows in similar natural, environmental and climate conditions to those described in detail in our early publication (Averyanov, Cribb, et al. 2003, 2004). It is noteworthy that this species sometime grows sympatrically with *S. fragrans*, similarly an extremely rare component of the flora of Vietnam.



- [21] Fruiting specimen of *S. scolopendria* in nature (HAL 11292).
- [22] *Schoenorchis scolopendria* (right) growing in nature together with *Schoenorchis fragrans*, a rare species of the flora of Vietnam (CPC 1139).