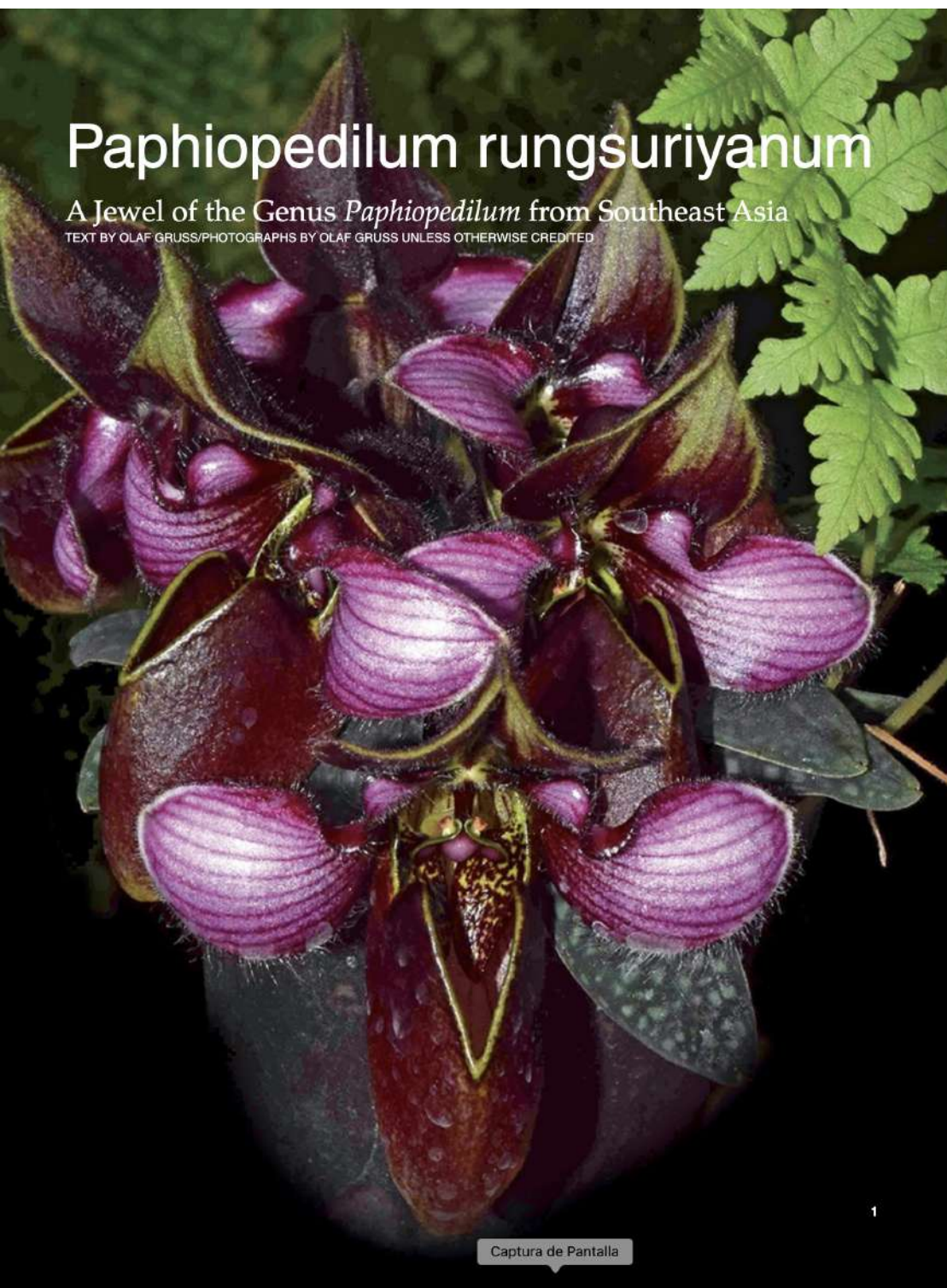


Paphiopedilum rungsuriyanum

A Jewel of the Genus *Paphiopedilum* from Southeast Asia

TEXT BY OLAF GRUSS/PHOTOGRAPHS BY OLAF GRUSS UNLESS OTHERWISE CREDITED



1

Captura de Pantalla

GRUSS

HISTORY In recent years, large numbers of orchids, including *Paphiopedilum* and *Dendrobium* have appeared from Laos in the plant markets in Thailand. In 2014, some relatively compact plants of the genus *Paphiopedilum* came into the trade from northern Laos and also found their way into the orchid market in Thailand. The traders believed, based on their marbled leaves, that the plants were *Paphiopedilum canhii*, but when the first plants were bloomed by Niwat Rungruang in Rangsit City, he was completely surprised and realized that this was not *Paph. canhii*, but likely a new, unknown species.

Niwat Rungruang contacted Thai friends for advice, and also sent detailed picture material of several flowering plants to Olaf Gruss and asked for an assessment. Everyone quickly agreed that this was a new species. Therefore, in an intensive mail exchange and by examining several plants in Thailand, a description was quickly prepared and posted online by Roland Schettler, Editor of the *Orchideen Journal* on May 28, 2014 at 8:00 pm. At the request of the Thai codescriptors (Gruss et al. 2014), the new species was given the official name: *Paphiopedilum rungsuriyanum* O. Gruss et al. 2014, although it was also suggested that the species be named after the country where it was found.

Although the plants with their marbled leaves appear quite similar to *Paph. canhii*, the flower is obviously different; it has much wider petals with intense red-purple coloring and a completely different staminodium. The new species can also be clearly distinguished by the underside of the leaf. While *Paph. canhii* is red-purple spotted, the underside of the new species' leaves appear gray-green with a broad purple vein.

In the diagnosis, the authors wrote: *Paphiopedilum rungsuriyanum* O. Gruss, N. Rungruang, Y. Chaisuriyakul et I. Dionisio spec. nov (2014)

DIAGNOSIS New species closely related to *Paphiopedilum canhii* Averyanov and O. Gruss, *Turczaninowia* 13(2):92, 2010, but differs significantly in the shorter and wider petals, the wider, higher lip and the folded almost oval staminodium, as well as the differently colored flower.

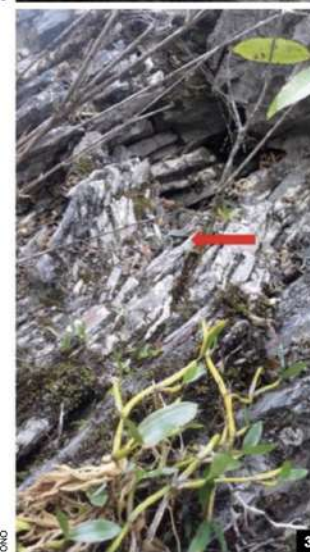
TYPE North-Laos, without exact information regarding location

Rungruang, Rangsit City, Thailand 2014-05-24; leg. NiwatRungruang: BKF sine num.

The habitats were plundered soon



2



H.A. DOVET
3



4

after the new species became known, as the attractive flowers promised a high market price. Unfortunately, however, it turned out that many of the plants died in transport to Bangkok and later in cultivation.

The first flowers were immediately pollinated and used in hybridization. It is hoped that artificial propagation will produce offspring so that the remaining plants in the original location are protected from further looting.

DESCRIPTION Lithophytic or terrestrial herb with three to five opposite leaves, a short stem, hardly any distance between the individual shoots. Leaves narrow elliptic, rounded off at the tip or indistinctly trilobed, 3.94–5.9 inches (10–15-cm) long, 0.59–0.79 inch (1.5–2 cm)

[1] *Paphiopedilum rungsuriyanum* 'Wössen' flowering at the end of June, 2017.

[2–3] *Paphiopedilum rungsuriyanum* photographed in situ in 2014. The small plants can be hard to spot; note the red arrow in [3].

[4] *Paphiopedilum rungsuriyanum* flowering in situ.

wide, underside sharply keeled; upper surface clearly marbled dark and pale green, bottom marbled gray-green, with few hairs at the leaf base. *Inflorescence*, upright to slightly drooping with one or rarely two flowers, 1.97–3.15 inch (5–8 cm) long, 0.31 inch (8 mm) in diameter, dark purple, covered with whitish to translucent hairs. *Bracts* conduplicate,



ovate, obtuse, pubescent, dark purple, 0.06–0.08 inch (1.5–2 mm) long and 0.08–0.12 inch (2–3 mm) wide. Ovary 0.39–0.59 inch (1–1.5 cm) long, 0.06–0.08 inch (1.5–2 mm) in diameter, yellow-green with brown stripes and whitish hairs, 1.57–1.97 inch (4–5 cm) in diameter. Flowers impressive, sepals and petals fuzzy on the exterior. Dorsal sepal broadly oval, almost round, concave, acuminate, usually bent slightly to the front, 0.79 inch (2 cm) high and wide, exterior pubescence white, keeled, inside dark purple with wide yellow stripes, sometimes veined red-purple, and narrow yellow edge; exterior dark red-purple, partly translucent yellow with darker veins. Synsepal significantly smaller than the dorsal sepal, similar in shape and hairiness, yellowish green-colored inside and outside dark purple, 0.71 inch (1.8 cm) long and 0.39 inch (1 cm) wide. Petals oblong oval,

rounded at the end, spreading, 0.79–1.18 inch (2–3 cm) long and 0.7–0.79 inch (1.8–2 cm) wide, marginal translucent hairs whitish, both sides intensely red-purple veined with wide red-purple margins, extreme edge whitish. Lip helmet-shaped with inward-folded lateral lobes, with a V-shaped neckline at the front, 0.79–1.18 inch (2–3 cm) long and 0.47 in (1.2 cm) wide, brownish, yellowish toward the back, edge at lip opening green, interior light yellow with reddish veins, lateral lobes yellow with red-purple spots. Column 0.2–0.28 inch (5–7 mm) long and 0.04–0.08 in (1–2 mm) in diameter, brown, pubescence whitish. Staminode crescent-shaped crosswise, bottom edge with two convexities and in the middle, with a clear tip, with forward curved sides, 0.24 inch (6 mm) wide and 1.78 inch (4.5 mm) high, dark red-purple with a clearly heart-shaped raised center

in whitish purple; a round spot of the same color on the lateral lobes. Pollinia two, spherical, yellow.

ETYMOLOGY *Rungsuriyanum*; the first part of the name honors Niwat Rungruang but in addition *rung* means heyday, success and prosperity and *suriya* means growing, increasing or sunshine in the morning.

GEOGRAPHICAL DISTRIBUTION Northern Laos at elevations from 3,280–4,921 feet (1,000–1,500 m).

HABITAT Plants of this species grow directly on sandstone rocks in partially shaded places with their roots partly in moss or rotted leaves in rock crevices.

CLIMATE Temperatures and the rainfall increase continuously from January to July, peaking in July. July to September is very wet. From September to January temperatures and precipitation decrease significantly.

In the summer, the temperature rises to almost 86 F (30 C) during the day and drops to 61–64 F (16–18 C) at night. In the winter temperatures reach about 73 F (23 C) during the day and fall to around 57 F (14 C) at night, but can drop to as low as 50 F (10 C).

PHENOLOGY Peak blooming occurs May–August, but flowering can occur sporadically in other seasons.

VARIABILITY The species varies only slightly in the color of the flowers, only the size and posture of the flowers is somewhat variable.

NOTE Shortly after the discovery of this new species, artificial reproduction was initiated. Reports from Thailand and Australia suggest that this has been relatively successful. The first plants of this species produced from seed should bloom in a year or two. The plants will certainly be more robust in cultivation than the ones taken from the habitat. Hopefully, this will reduce collection pressure on the habitats significantly.

Hybridization with this species appears to be successful and to date seven hybrids have been registered. Examples include *Paphiopedilum Goya* (*rungsuriyanum* × *concolor*) and *Paphiopedilum Lai* (*rungsuriyanum* × *thaiantum*), both registered in 2018, and *Paphiopedilum Laotian Beauty* (*rungsuriyanum* × *micranthum*) as well as *Paphiopedilum Pilot* (*rungsuriyanum* × *ciliolare*) registered in 2019.

References

- Averyanov, L.V. and O. Gruss. 2010. *Paphiopedilum canhui* – A New Species from Northern Vietnam. *Turczaninovia* 13(2):92.
Gruss, O., N. Rungruang, Y. Chaisuriyakul and I. Dionisio. 2014. *Paphiopedilum rungsuriyanum* — A New Spe-



cies Discovered in Northern Laos (Eine Neue Art aus Nord-Laos). *Orchideen Journal* 2–1, ISSN-Internet 2195-772X, 1–11.

Acknowledgments

Thanks are due the many photographers who made their material available to me and the growers and to orchid friends who gave me the opportunity to take photos of their collections. My thanks to Judith Rapacz-Hasler for the German-to-English translation.

— Olaf Gruss is internationally recognized for his work with *paphiopedilums*, *phragmipediums* and *phalaenopsis*. He has written books about the genus *Phalaenopsis* and the albino forms of the genus *Paphiopedilum*, as well as two books about the genus

[5–8] *Paphiopedilum rungsuriyanum* from various angles illustrating flower form and conformation.

[9] *Paphiopedilum rungsuriyanum* about a month before flowers opened in 2017.

[10] *Paphiopedilum rungsuriyanum* flower and plant illustrating perspective of size.

Phragmipedium. He has been a member of the editorial board of the journal of the German Orchid Society, *Die Orchidee*. Gruss resides in Germany and lectures throughout Europe, Japan, Taiwan, China and the USA. In der Au 48, 83224 Grassau, Germany (email: a-o.gruss@t-online.de).