

*OPHIOGLOSSUM POLYPHYLLUM*, A. BRAUN  
A NEW RECORD FOR QATAR

BY

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سرخس لسان الحية

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إن سرخس لسان الحية ينمو في المناطق المعتدلة على الأراضي الرطبة العشبية وفي المناطق الأخرى ينمو هذا السرخس على الأراضي المرتفعة والجبال التي يصل ارتفاعها إلى ما فوق الألف متر فوق سطح البحر.

وعليه يعتبر وجود هذا السرخس على أراضي دولة قطر الساحلية والمنخفضة حدث نادر وشاذ، وبما أنه قد تم العثور عليه لأول مرة فهو إضافة إلى الفلورا القطرية.

The genus *Ophioglossum*, family Ophioglossaceae, order Ophioglossales of the Filicineae occurs mainly in temperate regions on moist grassy areas or open woods. Elsewhere, in non-temperate regions, it occurs on higher altitudes where the climate is moist and comparatively cool. In Arabia and N. Africa e. g. Red Sea Hills, it occurs on altitudes above 1000m a. s. l. It does not occur on the lowlands where the temperatures are much higher and the air much warmer.

It is apparent that the common conditions under which the fern grows do not exist in Qatar. Qatar is a peninsula that experiences high temperatures [max. above 47°C in July], high humidity [that might reach 100%] with maximum above 90% in February and an erratic rainy season. Rain falls during January - May with its peak in February. The highest elevation on Qatar lies on the southern parts, 20 km. N. of Sawda Nathil (51 ° 3' E, 24° 43' N) and is 103 m. a.s.l.

Last season was an exceptionally wet one [58.2 mm during March 1995, at Doha Airport]. *Ophioglossum polyphyllum* A. Braun was collected from sites with sandy soils and varying amounts of stones [Fig. 1, a-c]

from locations at 51° 15' E, 25° 20' N and ca. 40 m a.s.l. The specimens collected were small, 1 - 4 - leaved terrestrial herbs and in their locations quite frequent. The roots are small and unbranched. The stems subterranean, cylindrical and rather fleshy. Sporangia are sessile and borne in two rows on erect fertile unbranched shoots. They are homosporous and clustered in a spike c. 1.5 cm long x 0.3 cm broad. Sporangia are c. 3.04 - 4.85 x 3.8 - 5.3 mm. Tetrads of spores are c. 2.13 x 1.82 mm. The spores are tetrahedral, 1.06 - 1.2 mm x 3.03 mm [Fig. 2]. The shoots resemble an inward curved tongue hence the common name the Adder's tongue fern. They appear above ground during the rainy season and are short-lived. The sterile fronds or blades are glossy, slightly fleshy, oval, canaliculate with the tip slightly reflexed [Fig. 3]. The fern may be more frequent than recorded and could be easily overlooked because of its small size and short life above ground. A transplanted specimen kept producing new shoots for over a month after transplant.

The presence of *Ophioglossum polyphyllum* in Qatar is unique in its occurrence on arid lowlands unlike other records in the neighbouring countries (Collenette, 1982; Boulos, 1995).



Fig. 1 (a - c) *Ophioglossum polyphyllum* on sands with varying amounts of stones (limestone).

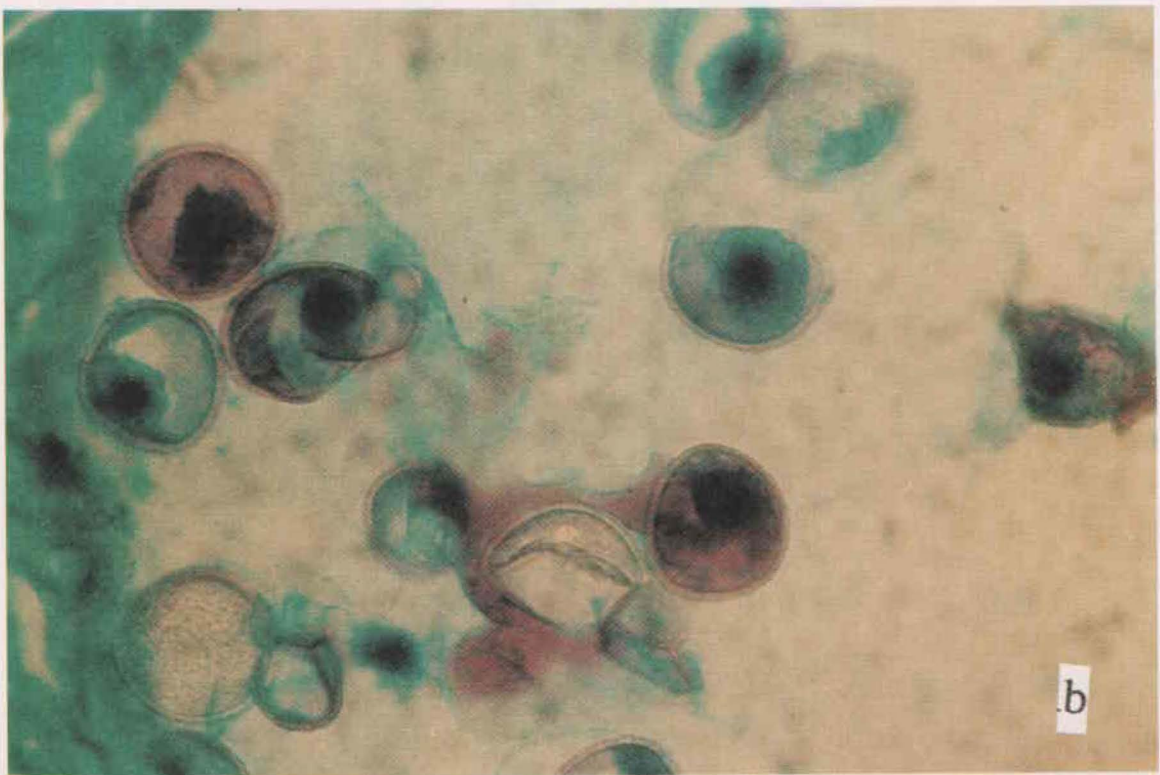
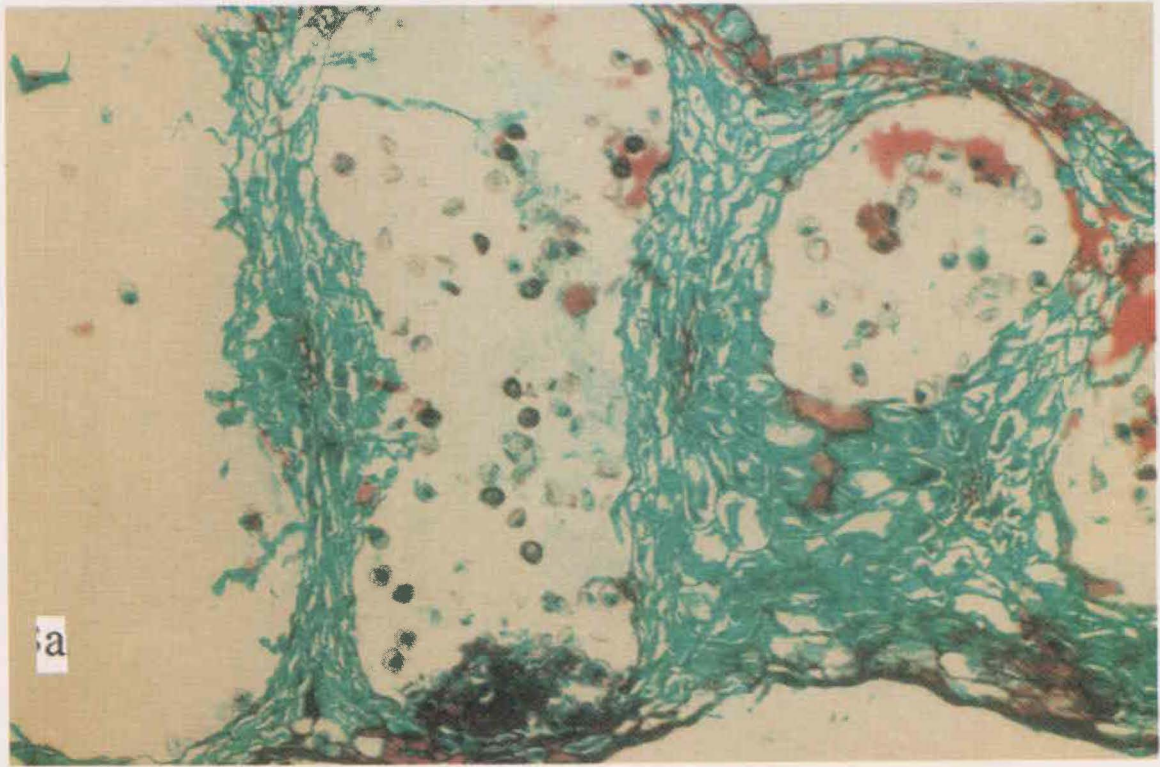


Fig. 2 (a) T. S. Sporangia of *Ophioglossum polyphyllum* ; (b) Spores

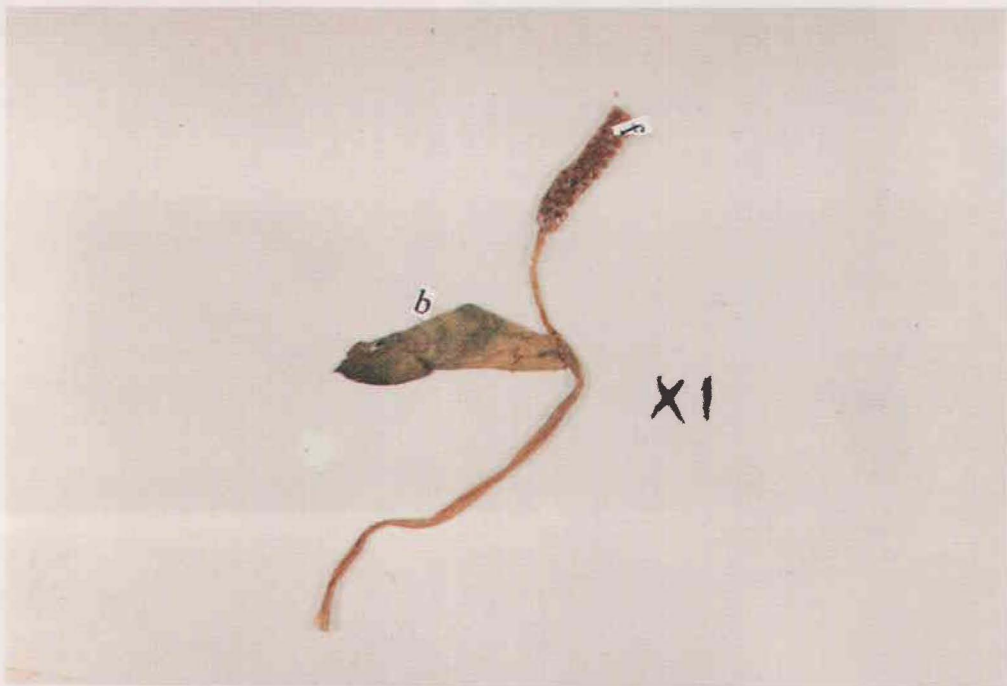


Fig. 3. *Ophioglossum polyphyllum*; f. fertile shoot, b. blade s. stem r. root.

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