Diagnosis. A normally elliptical species of *Bussonius* possessing three broad shields of similar thickness and a central cross bearing a tall spine.

Description. The distal shield is composed of around thirty flat, rectangular elements, joined along clockwise inclined sutures and displaying dextral imbrication. The distal shield is usually the same size as the lower two shields but may be smaller, revealing the outer portion of the underlying, intermediate shield. The intermediate shield is composed of around thirty, flat elements imbricating dextrally and joined along counter-clockwise inclined sutures. It appears to be joined to the proximal shield via a vertical inner wall, which lines the central area below the level of the distal shield. The distal shield is horizontal or slopes slightly inwards and the intermediate shield slopes outwards. The proximal shield has been observed in side view only and consists of around thirty elements with sinistral imbrication. The central area is spanned by a cross, aligned along the principal axes of the ellipse, supporting a hollow, central spine.
Dimensions. L: 6.1-6.6 (6.4) µm, W: 4.7-4.9 (4.7) µm, RH: 1.2-1.5 µm, SH: 4.5-4.8 µm.

Remarks. B. leufuensis is distinguished from B. prinsii by its greater size and thinner, flatter distal shield (unlike the almost loxolthic development seen in B. prinsii). The lack of any radial bars in the central area may be an original feature or the result of diagenetic loss.

As with B. prinsii, it is constructed from three rim components which are analogous to those found in Lotharingius. B. leufuensis retains the horizontal or inward sloping distal shield cycle (distal shield inner cycle of Lotharingius) and the convex intermediate shield (distal shield outer cycle) typical of the watznaueriacean rim and resembles L. sigillatus rather than L. barozii.

Derivation of name. From the type locality, Picun Leufu. Argentina.

Holotype. UCL-2054-14 (Pl. 10, fig. 15).

Isotype. UCL-2065-8, UCL-2065-11 (same specimen).

Type locality. Picun Leufu.

Type level. Toarcian.

Occurrence. Found in type material only.