**Acaenolithus vimineus** Black, 1973

**Description:**

Diagnosis: A species of *Acaenolithus* with the windows invaded by stout grid-bars at right angles to the arms of the cross, those arising from the long arms predominating.

Description: The distal surface of the marginal rim is fluted. The component plates are of uneven size and have curved sutures; at the external margin is a ring of narrow, tangentially-arranged elements which appear to be appendages of the plates of the main ring. The cross is made of much-elongated crystals with sharp edges, and is boldly striated. Where the arms meet the marginal rim, they are flanked by smooth triangular plates which frame the narrow ends of the windows. The spine is short and consists of a pile of little rhombohedral crystals. Each window is crossed by a set of bars parallel with the short arms of the cross; there are usually four, five or six bars in each window, the bars being about the same width as the
intervening spaces. Most specimens have another set of bars arising from the short arms of the cross; these are less developed than the main set, which they meet usually without crossing or fusion at the points of contact.

The rim appears to consist of three layers, the middle layer often projecting beyond the other two, and appearing as an outer cycle of more or less rectangular, petaloid elements. The proximal surface of the rim is covered with plates of irregular size and shape, bounded by curved sutures. The cross is not striated on this surface, but consists of brick-shaped elements arranged parallel with the length of the arms.

Measurements (in microns):

<table>
<thead>
<tr>
<th></th>
<th>d</th>
<th>d'</th>
<th>p</th>
<th>p'</th>
<th>c</th>
<th>c'</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holotype:</td>
<td>H.756</td>
<td>23186</td>
<td>distal</td>
<td>view</td>
<td>6·4</td>
<td>4·5</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>23157</td>
<td>proximal</td>
<td>6·7</td>
<td>5·0</td>
<td>6·2</td>
<td>4·8</td>
<td>3·5</td>
</tr>
<tr>
<td></td>
<td>23218a</td>
<td>7·6</td>
<td>5·0</td>
<td>7·2</td>
<td>4·8</td>
<td>5·7</td>
<td>2·6</td>
</tr>
<tr>
<td>H.1013</td>
<td>27908</td>
<td>distal</td>
<td>4·8</td>
<td>3·4</td>
<td>—</td>
<td>—</td>
<td>2·7</td>
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<tr>
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<td>28009</td>
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<td>3·8</td>
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<td></td>
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<td>4·4</td>
<td>5·6</td>
<td>3·9</td>
<td>3·4</td>
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<td>4·8</td>
<td>3·1</td>
<td>—</td>
<td>—</td>
<td>3·0</td>
</tr>
</tbody>
</table>

*d, d' = major and minor diameters respectively of the distal shield or distal surface.

p, p' = major and minor diameters of the proximal shield or proximal surface.

c, c' = major and minor diameters of the central area; figures in italics indicate measurements on the proximal side, which are not always strictly comparable with those made on the distal side.

n = number of component elements in the distal shield, loxolith-ring or other marginal structure.

**Type level:**

Upper Gault (Upper Albian).


**Type locality:**

East Wear Bay, Folkestone (Southeastern England).

**Depository:**

Collection of electron micrographs at the Sedgwick Museum, Cambridge.

Holotype: SM 23186; fig. 12; from the Upper Gault at East Wear Bay, Folkestone (H.756).

**Author:**

Black M., 1973, p. 59; pl. 20, figs. 6, 8, 11, 12, 15, 16; pl. 21, fig. 3.

**Reference:**