Identification of the species of *Persicaria* that grow together by water, especially the margins of lakes and pools, may be a source of considerable difficulty. Although variants of one species may resemble closely one of the other species, hybrids also occur but the experimental and field evidence available suggests that they are scarce (Timson 1965; Parnell & Simpson 1988). As with so many members of the Polygonaceae at least some ripe fruit is essential for the determination.

The following key and Table (the latter from Parnell & Simpson 1988), may help.

1. Flowering spikes dense, stout, the flowers crowded and overlapping
2. Flowering spikes lax, slender, the flowers not or hardly overlapping

2. Peduncles with numerous, ± sessile, yellow glands (giving them a characteristic rough feel); flowers usually dull pink, white or greenish  
   *Persicaria lapathifolia* (L.) Delarbre

2. Peduncles without glands, glabrous, smooth, or rarely with a very few glands; flowers bright pink, sometimes pale pink or whitish, sometimes variable within a population *Persicaria maculosa* Gray

3. Cleistogamous flowers present in many leaf-axils; perianth usually greenish in part, with many raised transparent glands that become brown on drying (best seen with lens or binocular microscope); peppery taste when fresh  
   *Persicaria hydropiper* (L.) Delarbre

3. Cleistogamous flowers not present; perianth pink, without glands or sometimes with a few flat glands; no peppery taste when fresh

4. Leaves linear-lanceolate to linear-oblong, usually less than 8 mm wide; nut 1.8-2.5 mm  
   *Persicaria minor* (Huds.) Opiz

4. Leaves lanceolate, usually at least 10 mm wide; nut 2.8-4 mm *Persicaria mitis* (Schrank) Assenov

<table>
<thead>
<tr>
<th>P. minus</th>
<th>P. mitis</th>
<th>P. hydropiper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuts</td>
<td>Mean c. 2.2 mm long × c. 1.1 mm wide, somewhat shiny</td>
<td>Mean c. 3.0 mm long × c. 1.8 mm wide, very shiny</td>
</tr>
<tr>
<td>Perianth glands</td>
<td>Absent</td>
<td>Flat, mean c. 12 per flower</td>
</tr>
<tr>
<td>Perianth</td>
<td>c. 2.5 mm long, usually reddish</td>
<td>c. 3.7 mm long, pale pink to purplish pink</td>
</tr>
<tr>
<td>Spike</td>
<td>Erect</td>
<td>Slightly nodding</td>
</tr>
<tr>
<td>Mid stem ochrea tooth</td>
<td>c. 1.7 mm long</td>
<td>c. 1.7 mm long</td>
</tr>
</tbody>
</table>
Persicaria minor is generally a small, elegant, somewhat decumbent plant, which can be recognised by the narrow leaves, slender spikes and small nuts. It is locally distributed. A taller variant, up to 50 cm, more erect and with somewhat broader leaves, has been called Polygonum minus Hudson var. elatum Moss, and is often confused with P. mitis.

Persicaria mitis is also an elegant plant, in contrast with the rather coarse-looking P. hydropiper. The flowers of P. mitis are an attractive purplish-pink colour, but can vary to greenish white. The glands on the perianth are flat and few in numbers compared to P. hydropiper.

A further taxon that may cause confusion is Polygonum hydropiper var. densiflorum A. Braun, characterised by its taller, more robust habit and rather dense spikes of flowers. This variant seems to be less peppery-tasting than var. hydropiper. The peppery taste of P. hydropiper is a good diagnostic character in the living state.
