

1 **Species identification by experts and non-experts: comparing images from field guides**

2 **Supplementary material**

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9 **Supplementary Table S1.** *Bombus* species and caste, and relevant illustrator for each image, used  
 10 in the survey.

Image Type	Species and caste	Species and caste	Artist	
			Image on left	Image on right
<b>Match</b>	<i>B. distinguendus</i> (Morawitz 1869) (Queen)		C. Shields	A.J. Hopkins
<b>Match</b>	<i>B. hortorum</i> (Linnaeus 1761) (Queen)		C. Shields	A.J. Hopkins
<b>Match</b>	<i>B. humilis</i> (Illiger 1806) (Queen)		A.J. Hopkins	C. Shields
<b>Match</b>	<i>B. jonellus</i> (Kirby 1802) (Queen)		C. Shields	A.J. Hopkins
<b>Match</b>	<i>B. pratorum</i> (Linnaeus 1761) (Male)		C. Shields	A.J. Hopkins
<b>Match</b>	<i>B. ruderarius</i> (Müller 1765) (Male)		C. Shields	A.J. Hopkins
<b>Match</b>	<i>B. ruderarius</i> (Müller 1765) (Queen)		A.J. Hopkins	C. Shields
<b>Match</b>	<i>B. soroensis</i> (Fabricius 1777) (Queen)		A.J. Hopkins	C. Shields
<b>Match</b>	<i>B. sylvarum</i> (Linnaeus 1761) (Queen)		C. Shields	A.J. Hopkins
<b>Match</b>	<i>B. terrestris</i> (Linnaeus 1758) (Queen)		A.J. Hopkins	C. Shields
<b>Mismatch</b>	<i>B. hortorum</i> (Linnaeus 1761) (Queen)	<i>B. ruderatus</i> (Fabricius 1775) (Queen)	C. Shields	C. Shields
<b>Mismatch</b>	<i>B. lapidarius</i> (Linnaeus 1758) (Male)	<i>B. ruderarius</i> (Müller 1765) (Male)	A.J. Hopkins	A.J. Hopkins
<b>Mismatch</b>	<i>B. lapidarius</i> (Linnaeus 1758) (Queen)	<i>B. ruderarius</i> (Müller 1765) (Queen)	C. Shields	C. Shields
<b>Mismatch</b>	<i>B. lucorum</i> (Linnaeus 1761) (Queen)	<i>B. terrestris</i> (Linnaeus 1758) (Queen)	A.J. Hopkins	C. Shields
<b>Mismatch</b>	<i>B. lucorum</i> (Linnaeus 1761) (Queen)	<i>B. soroensis</i> (Fabricius 1777) (Queen)	C. Shields	C. Shields
<b>Mismatch</b>	<i>B. monticola</i> (Smith 1849) (Queen)	<i>B. lapidarius</i> (Linnaeus 1758) (Queen)	A.J. Hopkins	A.J. Hopkins
<b>Mismatch</b>	<i>B. muscorum</i> (Linnaeus 1758) (Male)	<i>B. humilis</i> (Illiger 1806) (Male)	C. Shields	C. Shields
<b>Mismatch</b>	<i>B. pascuorum</i> (Scopoli 1763) (Male)	<i>B. muscorum</i> (Linnaeus 1758) (Male)	C. Shields	C. Shields
<b>Mismatch</b>	<i>B. pascuorum</i> (Scopoli 1763) (Queen)	<i>B. sylvarum</i> (Linnaeus 1761) (Queen)	A.J. Hopkins	C. Shields
<b>Mismatch</b>	<i>B. subterraneus</i> (Linnaeus 1758) (Queen)	<i>B. monticola</i> (Smith 1849) (Queen)	A.J. Hopkins	C. Shields

12 **Supplementary Table S2.** List of UK and Palaearctic species of the genus *Bombus*.

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<i>argillaceus</i>	<i>hypnorum</i>	<i>runderarius</i>
<i>armeniacus</i>	<i>hypocrita</i>	<i>runderatus</i>
<i>atripes</i>	<i>jonellus</i>	<i>rupestris</i>
<i>barbutellus</i>	<i>ladakhensis</i>	<i>schrencki</i>
<i>bohemicus</i>	<i>lapidarius</i>	<i>soroensis</i>
<i>campestris</i>	<i>lucorum</i>	<i>subterraneus</i>
<i>cryptarum</i>	<i>margreiteri</i>	<i>sylvarum</i>
<i>cullumanus</i>	<i>monticola</i>	<i>sylvestris</i>
<i>deuteronymus</i>	<i>morawitzianus</i>	<i>terrestris</i>
<i>fragrans</i>	<i>muscorum</i>	<i>tichenkoi</i>
<i>hedini</i>	<i>opulentus</i>	<i>ussurensis</i>
<i>hortorum</i>	<i>pascuorum</i>	<i>wurflenii</i>
<i>humilis</i>	<i>perezi</i>	
<i>hyperboreus</i>	<i>persicus</i>	

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