

**Supplementary material**

Appendix 1.

Table A1. Repeatability of colorimetric variables for each of the two body areas in wild adult great tits. Yellow Chroma is used to calculate the focal colour chroma of the yellow breast, and blue chroma is used to calculate the focal colour chroma of the blue-black crown. The repeatability is calculated from all individuals from which feathers were collected. Yellow breast: N = 206; Blue-black crown: N = 97.

<b>Colour trait</b>	<b>Yellow Breast</b>		<b>Blue-black Crown</b>	
	R	F <sup>a</sup>	R	F <sup>a</sup>
UV Chroma	0.76	17.07	0.88	35.80
Focal colour Chroma	0.77	18.38	0.69	11.37
Hue	0.79	19.56	0.82	23.20
Brightness	0.81	22.83	0.71	12.73

Figure A1. Spectral reflectance of the yellow breast (a) and the blue-black crown (b) feathers of individuals with high vs. low PC scores (PC1 and PC2) in our wild adult great tit population. For the blue-black crown (b), we showed the second highest PC1 value due to overlap between the highest PC1 and lowest PC2.

