

Supplementary Material: Rapid mate recognition promotes greater avian-perceived plumage sexual dichromatism in true thrushes (genus: *Turdus*)

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Supplementary Tables and Figures

| Characteristic | Achromatic & Chromatic JND > 1, N = 77 ¹ | Achromatic & Chromatic JND > 2, N = 77 ¹ | Achromatic & Chromatic JND > 3, N = 77 ¹ |
|--|--|--|--|
| Number of Sexually-Dimorphic Plumage Patches | | | |
| 0 | 1 (1.3%) | 34 (44%) | 49 (64%) |
| 1 | 4 (5.2%) | 14 (18%) | 10 (13%) |
| 2 | 11 (14%) | 7 (9.1%) | 2 (2.6%) |
| 3 | 10 (13%) | 3 (3.9%) | 2 (2.6%) |
| 4 | 10 (13%) | 1 (1.3%) | 7 (9.1%) |
| 5 | 12 (16%) | 4 (5.2%) | 0 (0%) |
| 6 | 8 (10%) | 3 (3.9%) | 0 (0%) |
| 7 | 4 (5.2%) | 4 (5.2%) | 3 (3.9%) |
| 8 | 5 (6.5%) | 1 (1.3%) | 1 (1.3%) |
| 9 | 5 (6.5%) | 1 (1.3%) | 1 (1.3%) |
| 10 | 7 (9.1%) | 5 (6.5%) | 2 (2.6%) |
| ¹ Statistics presented: n (%) | | | |

Table S1: Number of sexually-dimorphic plumage patches for combined achromatic and chromatic just noticeable differences (JND) thresholds by number of *Turdus* thrush species (% of species).

| Characteristic | Achromatic > 1 JND, N = 77 ¹ | Achromatic > 2 JND, N = 77 ¹ | Achromatic > 3 JND, N = 77 ¹ | Chromatic > 1 JND, N = 77 ¹ | Chromatic > 2 JND, N = 77 ¹ | Chromatic > 3 JND, N = 77 ¹ |
|--|---|---|---|--|--|--|
| Number of Sexually-Dimorphic Plumage Patches | | | | | | |
| 0 | 8 (10%) | 41 (53%) | 51 (66%) | 6 (7.8%) | 47 (61%) | 61 (79%) |
| 1 | 19 (25%) | 10 (13%) | 10 (13%) | 15 (19%) | 11 (14%) | 5 (6.5%) |
| 2 | 14 (18%) | 9 (12%) | 4 (5.2%) | 22 (29%) | 5 (6.5%) | 3 (3.9%) |
| 3 | 11 (14%) | 5 (6.5%) | 7 (9.1%) | 11 (14%) | 7 (9.1%) | 2 (2.6%) |
| 4 | 11 (14%) | 5 (6.5%) | 3 (3.9%) | 14 (18%) | 1 (1.3%) | 2 (2.6%) |
| 5 | 14 (18%) | 7 (9.1%) | 2 (2.6%) | 9 (12%) | 6 (7.8%) | 4 (5.2%) |

¹ Statistics presented: n (%)

Table S2: Number of sexually-dimorphic plumage patches for separate achromatic and chromatic just noticeable differences (JND) thresholds by number of *Turdus* thrush species (% of species).

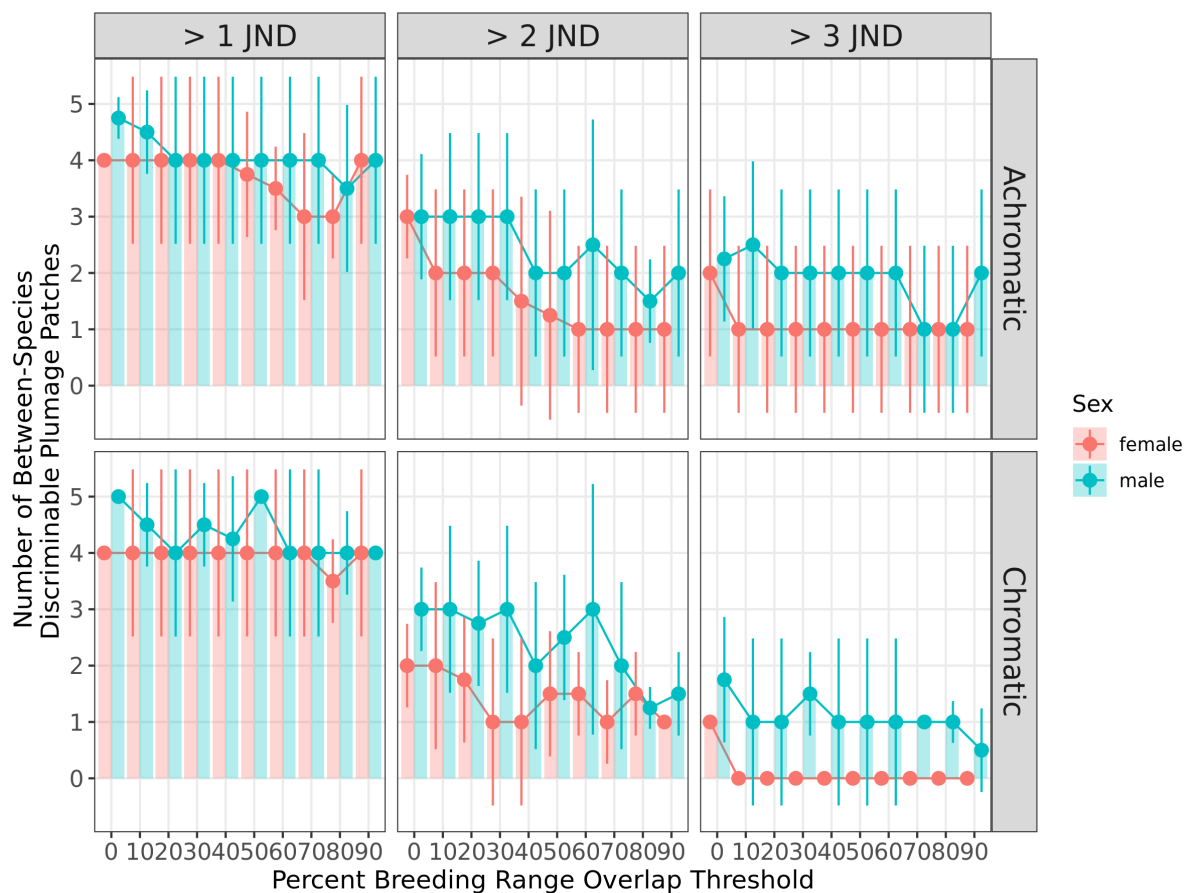


Fig S1: Median \pm median absolute deviation of number of distinguishable plumage patches by just noticeable differences (JND) thresholds of 1, 2, and 3 between male and female *Turdus* thrush species in sympatry at various breeding range overlaps (percent).

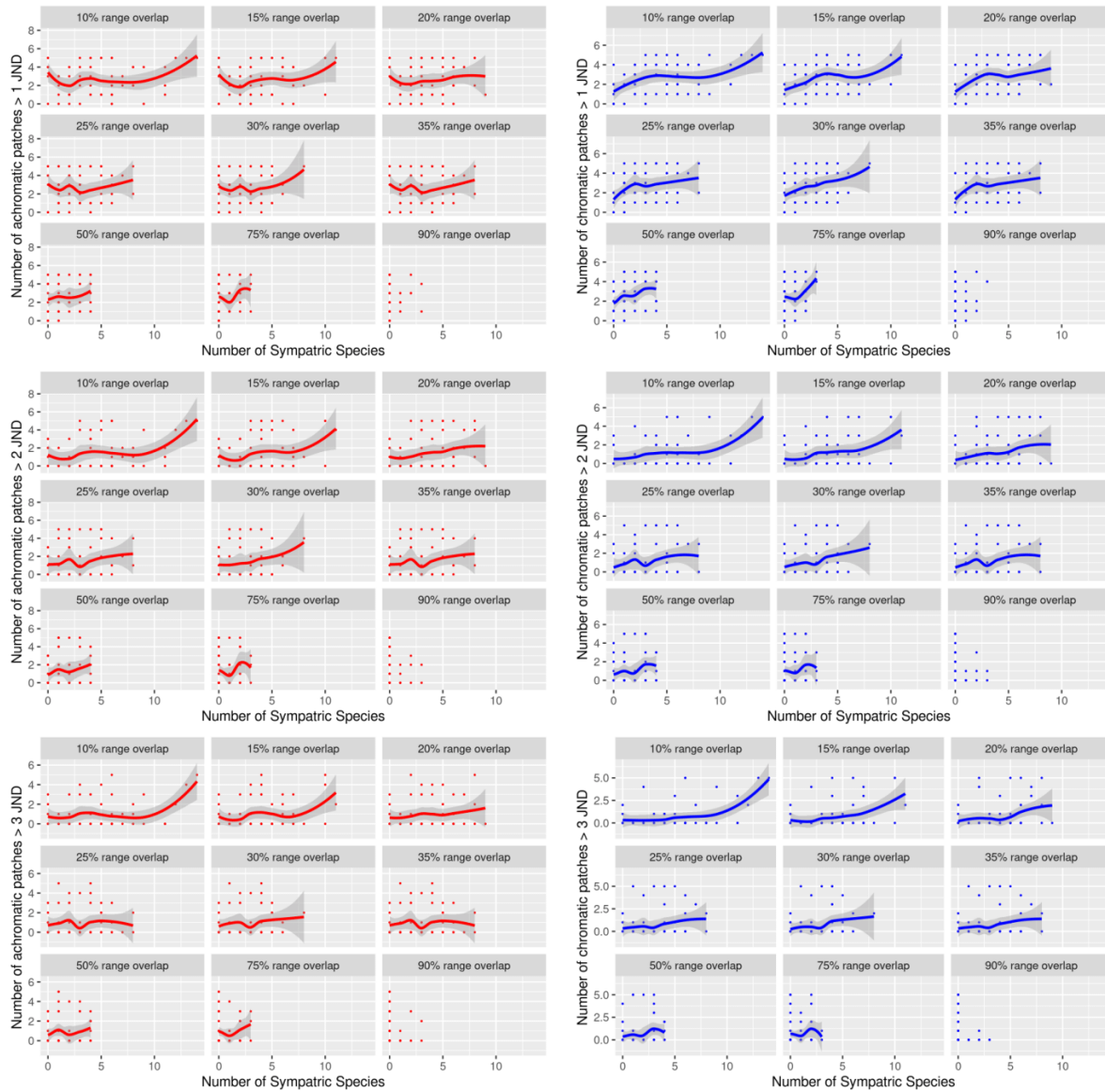


Fig S2: Number of sexually-dichromatic chromatic and achromatic plumage patches versus number of sympatric *Turdus* species, faceted by sympatry overlap thresholds (0-90%). Lines are Loess nonlinear regression fits with no correction for phylogenetic relatedness among species.

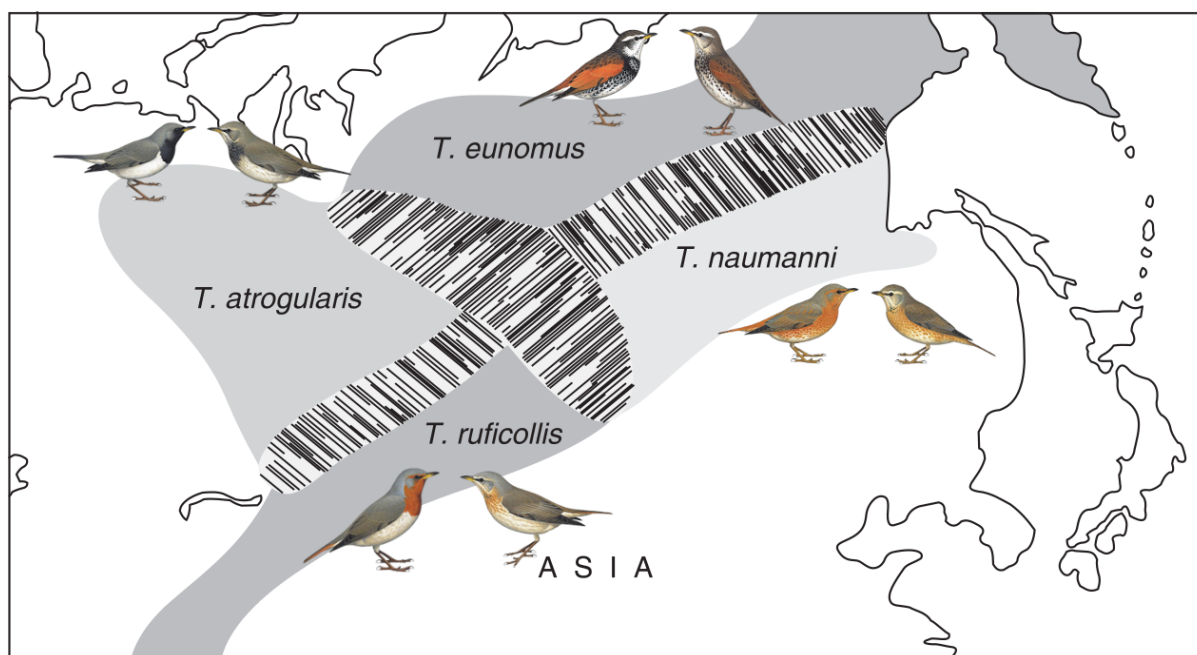


Fig S3: Four species hybrid zone in north-central Asia (*T.atrogularis*, *T.ruficollis*, *T.eunomus*, and *T.naumanni*). Map is from [1]. Illustrations © HBW Alive/Lynx Edicions.

References

1. McCarthy EM. 2006 *Handbook of avian hybrids of the world*. Oxford ; New York: Oxford University Press.