Note S1 GGA 18 compared to MGA 20

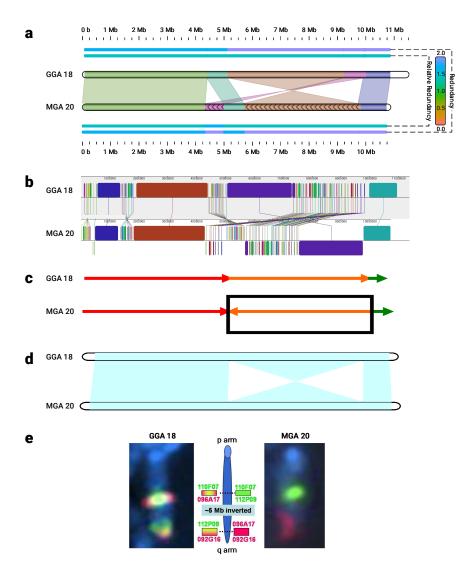


Fig. S1. Pair-wise comparison of G. gallus chromosome 18 and M. gallopavo chromosome 20. (a) Smash++, with k=14 and 5 used by an FCM and an STMM, respectively. The blocks smaller than 500 Kb are discarded; (b) progressiveMauve [1], with LCB (locally collinear block) weight = 18692. Reverse complements are shown in lower level; (c) adopted from [2], which is confirmed by fluorescence in situ hybridization (FISH) analysis. The box shows a local rearrangement; (d) SynBrowser [3], with the resolution = 150 Kb (minimum size of a reference block); (e) adopted from [4], which confirms an inversion rearrangement of size \sim 5 Mb by FISH analysis.

References 2

References

[1] A. E. Darling, B. Mau, and N. T. Perna, "progressive mauve: multiple genome alignment with gene gain, loss and rearrangement," *PloS one*, vol. 5, no. 6, p. e11147, 2010.

- [2] Y. Zhang, X. Zhang, T. H. O'Hare, W. S. Payne, J. J. Dong, C. F. Scheuring, M. Zhang, J. J. Huang, M.-K. Lee, M. E. Delany et al., "A comparative physical map reveals the pattern of chromosomal evolution between the turkey (*Meleagris gallopavo*) and chicken (*Gallus gallus*) genomes," *BMC genomics*, vol. 12, no. 1, p. 447, 2011.
- [3] J. Lee, W.-y. Hong, M. Cho, M. Sim, D. Lee, Y. Ko, and J. Kim, "Synteny portal: a web-based application portal for synteny block analysis," *Nucleic acids research*, vol. 44, no. W1, pp. W35–W40, 2016.
- [4] R. A. Dalloul, J. A. Long, A. V. Zimin, L. Aslam, K. Beal, L. A. Blomberg, P. Bouffard, D. W. Burt, O. Crasta, R. P. Crooijmans et al., "Multi-platform next-generation sequencing of the domestic turkey (Meleagris gallopavo): genome assembly and analysis," PLoS biology, vol. 8, no. 9, p. e1000475, 2010.