

# Chromosomal analysis in *Crotophaga ani* (Aves, Cuculiformes) reveals extensive genomic reorganization and an unusual Z-autosome Robertsonian translocation

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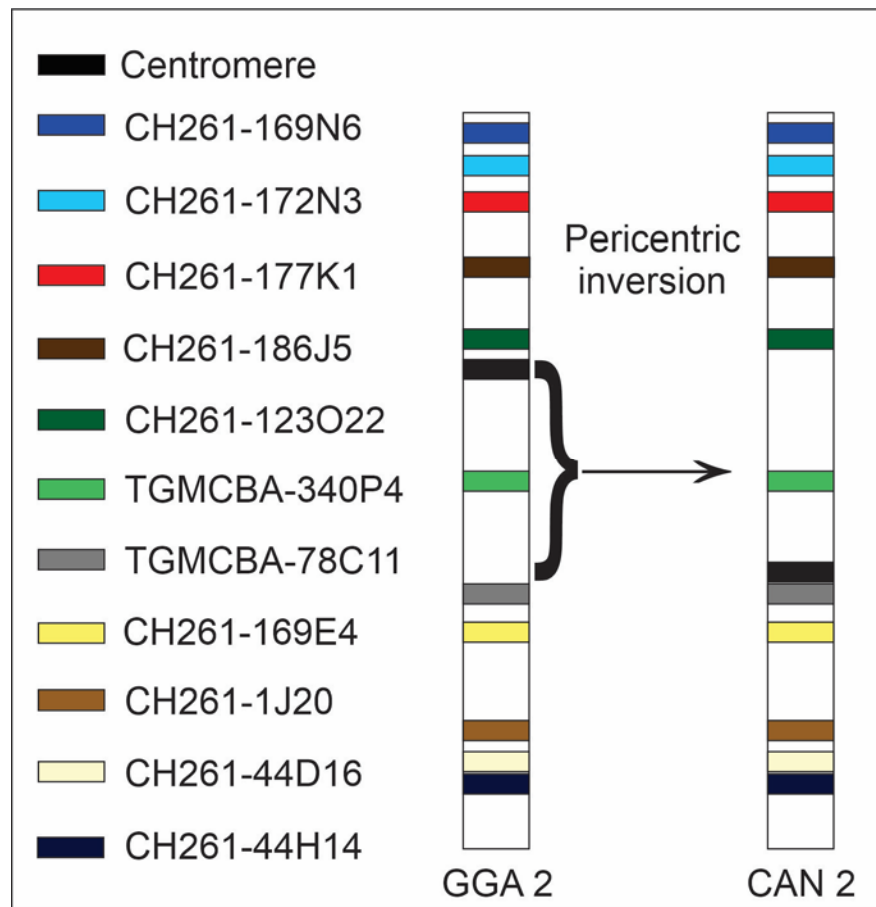
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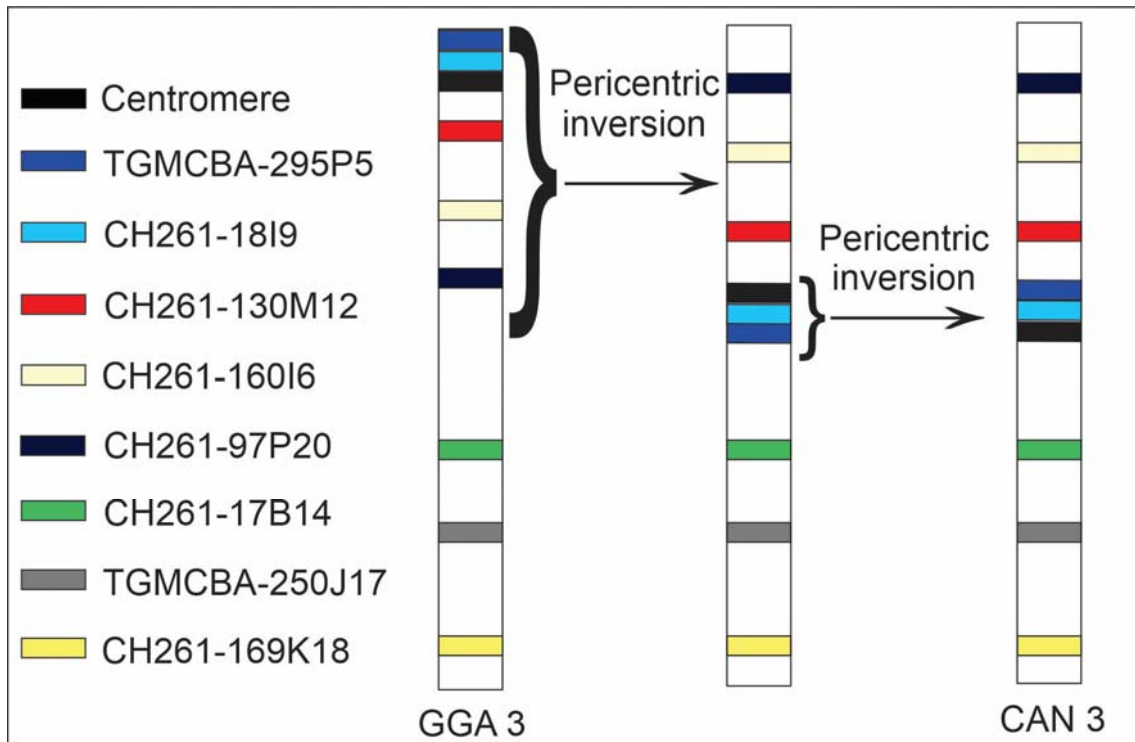
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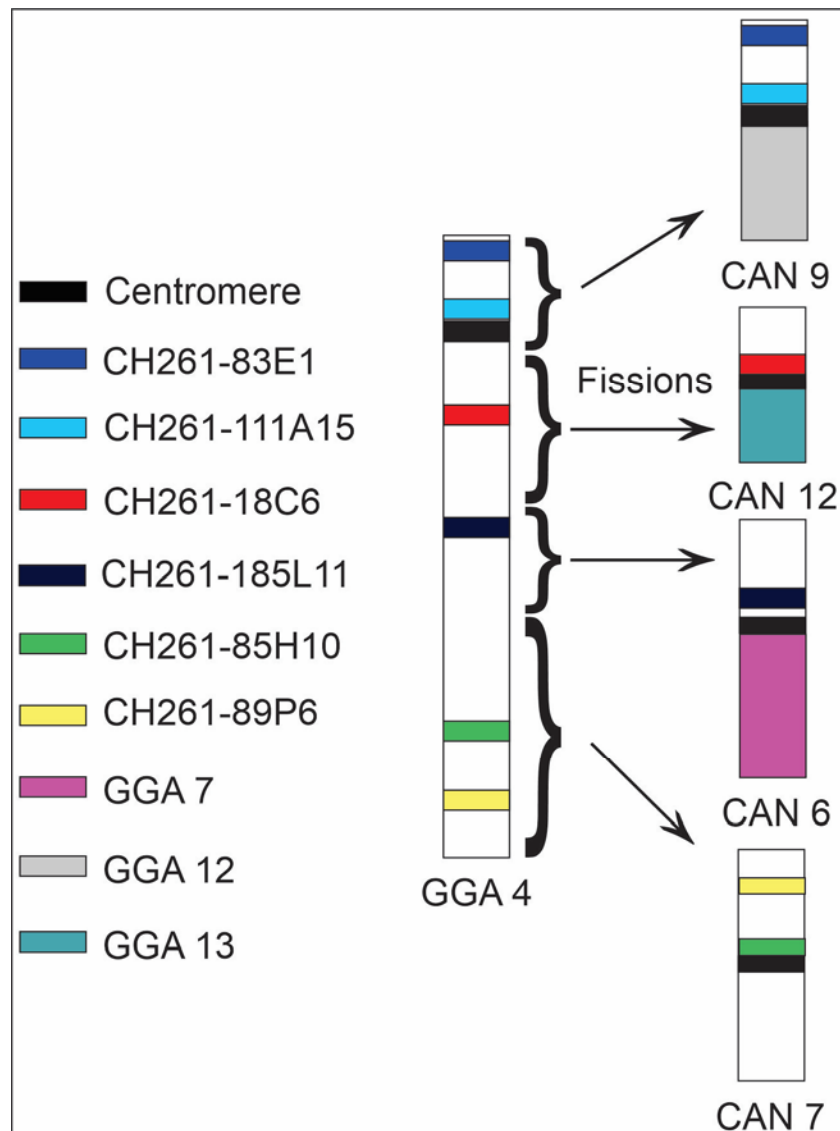
## SUPPLEMENTARY INFORMATION



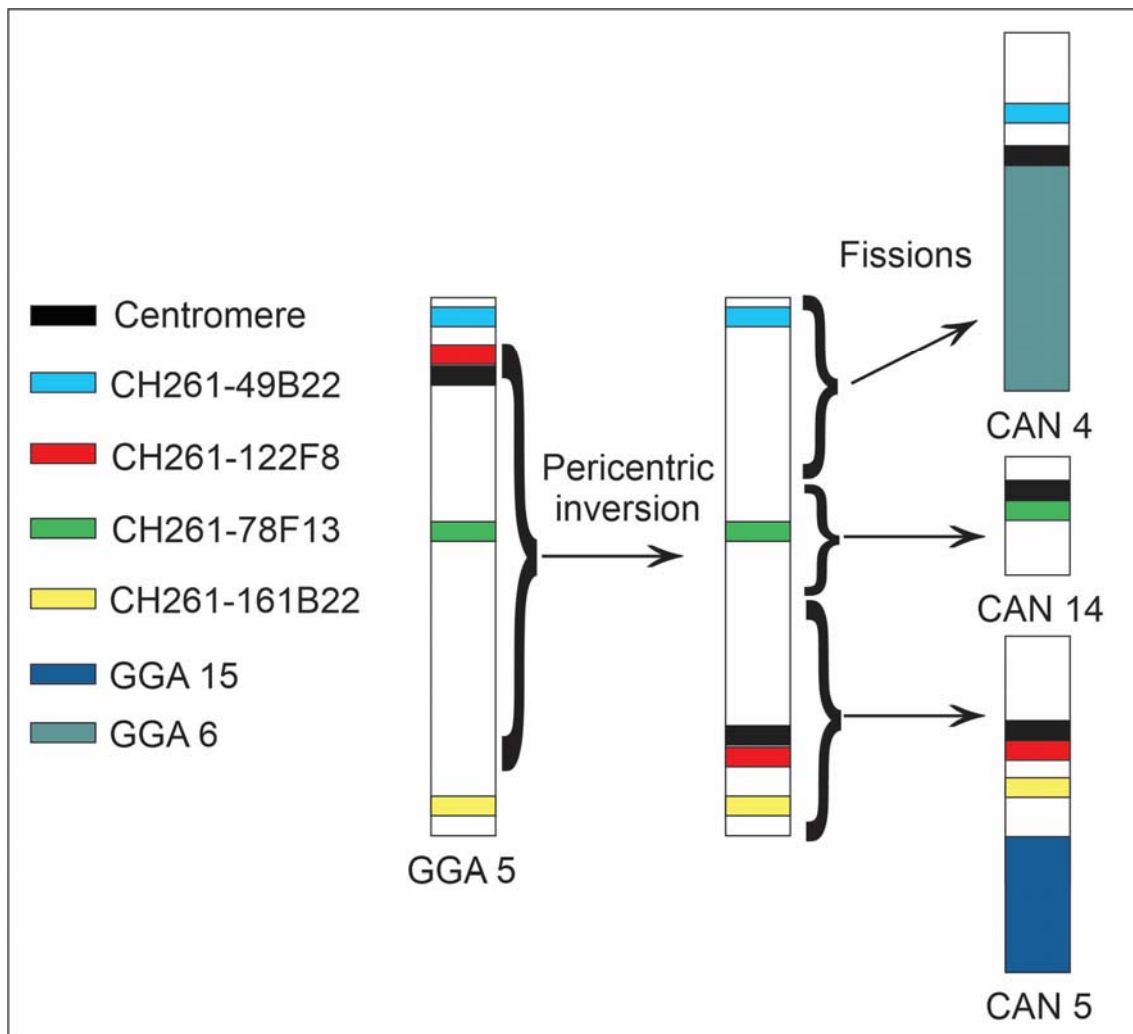
**Figure S1:** Schematic representation of chromosome localization of chicken (CH261) and zebra finch (TGMCBA) BACs homologous to chicken chromosome 2 (GGA2) used in *Crotophaga ani* (CAN). The BACs used and centromeres are indicated by the colors. The braces indicate the chromosomal rearrangements detected. A centromere reposition or pericentric inversion originated the chromosome 2 of *C. ani* (CAN2).



**Figure S2:** Schematic representation of chromosome localization of chicken (CH261) and zebra finch (TGMCBA) BACs homologous to chicken chromosome 3 (GGA3) used in *Crotophaga ani* (CAN). The BACs used and centromeres are indicated by the colors. The braces indicate the chromosomal rearrangements detected. Two pericentric inversions occurred in the chromosome 3 of *C. ani* (CAN3).



**Figure S3:** Schematic representation of chromosome localization of chicken (CH261) and zebra finch (TGMCBA) BACs homologous to chicken chromosome 4 (GGA4) used in *Crotophaga ani* (CAN). The BACs used and centromeres are indicated by the colors. The braces indicate the chromosomal rearrangements detected. The GGA4p was preserved as a separated chromosome in *C. ani* (CAN9), as in the ancestral bird karyotype. Two fissions events have occurred in ancestral chromosome GGA4q in *C. ani*, originating the chromosome CAN6, 7 and 12.



**Figure S4:** Schematic representation of chromosome localization of chicken (CH261) and zebra finch (TGMCB) BACs homologous to chicken chromosome 5 (GGA 5) used in *Crotophaga ani* (CAN). The BACs used and centromeres are indicated by the colors. The braces indicate the chromosomal rearrangements detected. One pericentric inversion and two fissions occurred in the GGA 5 of *C. ani*. Additionally, a segment from GGA 5 fused to a segment from GGA 6 (CAN 4) and other segment from GGA 5 fused to GGA 15 (CAN 5).

**Table S1:** List of BAC applied to *Crotophaga ani* (CAN).

| BAC ID      | GGA Chr | CAN Chr |
|-------------|---------|---------|
| TGMCB-206D5 | 1       | 1       |
| CH261-89G23 | 1       | 1       |
| CH261-119K2 | 1       | 1       |
| CH261-120J2 | 1       | 1       |
| CH261-125F1 | 1       | 1       |

|               |   |     |
|---------------|---|-----|
| TGMCBA-146O14 | 1 | 1   |
| CH261-118M1   | 1 | 1   |
| CH261-29N14   | 1 | 1   |
| CH261-9B17    | 1 | 1   |
| CH261-83O13   | 1 | 1   |
| CH261-107E2   | 1 | 1   |
| CH261-58K12   | 1 | 1   |
| CH261-169N6   | 2 | 2   |
| CH261-172N3   | 2 | 2   |
| CH261-177K1   | 2 | 2   |
| CH261-186J5   | 2 | 2   |
| CH261-123O22  | 2 | 2   |
| TGMCBA-340P4  | 2 | 2   |
| TGMCBA-78C11  | 2 | 2   |
| CH261-169E4   | 2 | 2   |
| CH261-1J20    | 2 | 2   |
| CH261-44H16   | 2 | 2   |
| CH261-44H14   | 2 | 2   |
| TGMCBA-295P5  | 3 | 3   |
| CH261-18I9    | 3 | 3   |
| CH261-130M12  | 3 | 3   |
| CH261-160I6   | 3 | 3   |
| CH261-97P20   | 3 | 3   |
| CH261-17B14   | 3 | 3   |
| TGMCBA-250J17 | 3 | 3   |
| CH261-169K18  | 3 | 3   |
| CH261-83E1    | 4 | 9   |
| CH261-111A15  | 4 | 9   |
| CH261-18C6    | 4 | 12p |
| CH261-185L11  | 4 | 7   |
| CH261-85H10   | 4 | 6   |
| CH261-89P6    | 4 | 6   |
| CH261-49B22   | 5 | 4   |
| CH261-78F13   | 5 | 14  |
| CH261-122F8   | 5 | 5   |
| CH261-161B22  | 5 | 5   |
| TGMCBA-382J4  | 6 | 4   |
| CH261-49F3    | 6 | 11q |
| CH261-56K7    | 7 | 6   |
| CH261-180H18  | 7 | 6   |
| CH261-107D8   | 8 | 8   |
| TGMCBA-252A4  | 8 | 15  |
| CH261-183N19  | 9 | 13  |

|               |    |     |
|---------------|----|-----|
| CH261-187M16  | 9  | 13  |
| CH261-115G24  | 10 | 10  |
| CH261-71G18   | 10 | 10  |
| CH261-154H1   | 11 | 8   |
| CH261-121N21  | 11 | 8   |
| CH261-60P3    | 12 | 9q  |
| CH261-4M5     | 12 | 9q  |
| TGMCBA-321B13 | 13 | 12q |
| CH261-115I12  | 13 | 12q |
| CH261-122H14  | 14 | 11p |
| CH261-69D20   | 14 | 11p |
| CH261-90P23   | 15 | 5q  |
| TGMCBA-266G23 | 15 | 5q  |
| TGMCBA-375I5  | 17 | Zp  |
| CH261-42P16   | 17 | Zp  |
| CH261-60N6    | 18 | 17  |
| CH261-72B18   | 18 | 17  |
| CH261-10F1    | 19 | 18  |
| CH261-50H12   | 19 | 18  |
| TGMCBA-250E3  | 20 | 19  |
| TGMCBA-341F20 | 20 | 19  |
| CH261-83I20   | 21 | 20  |
| CH261-122K8   | 21 | 20  |
| CH261-40J9    | 22 | 21  |
| CH261-18G17   | 22 | 21  |
| CH261-191G17  | 23 | 22  |
| CH261-90K11   | 23 | 22  |
| CH261-103F4   | 24 | 23  |
| CH261-65O4    | 24 | 23  |
| CH261-59C21   | 25 | 10  |
| CH261-127K7   | 25 | 10  |
| CH261-186M13  | 26 | 24  |
| CH261-170L23  | 26 | 24  |
| CH261-66M16   | 27 | 25  |
| CH261-28L10   | 27 | 25  |
| CH261-72A10   | 28 | 26  |
| CH261-64A15   | 28 | 26  |
| CH261-129A16  | Z  | Z   |
| CH261-133M4   | Z  | Z   |
| TGMCBA-200J22 | Z  | Z   |
| CH261-94E12   | W  | W   |