

SUPPLEMENTARY MATERIAL

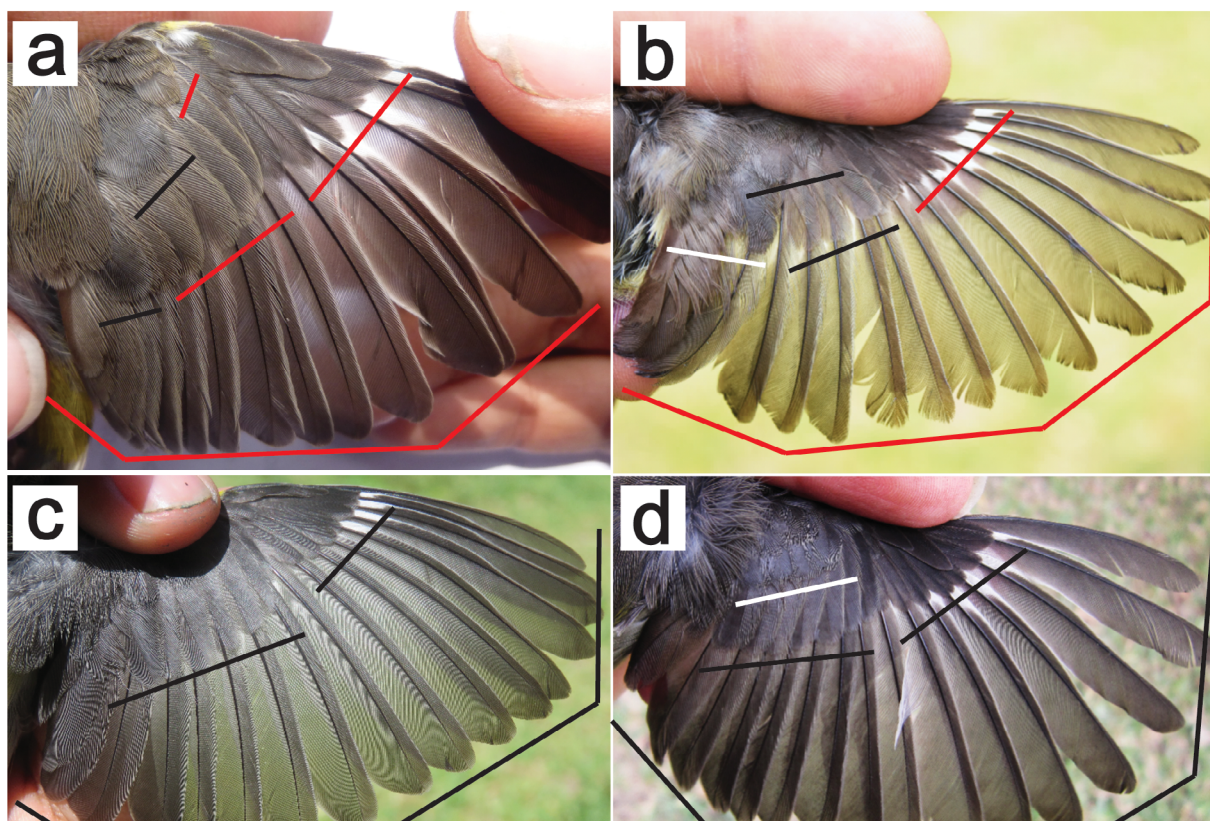
## Supplementary material article: Molt patterns and age and sex determination criteria for selected landbirds in an urban area of the Peruvian Central Coast

Material suplementario artículo: Patrones de muda y criterios de determinación de edad y sexo para aves terrestres seleccionadas en un área urbana de la Costa Central del Perú

**Citation:** Díaz A, Ayala P, Valdiviezo E, Mendoza J, Silva K, Rivas R, Cornelio D, Guardia F, Tenorio Y, Calsina R, Alvariño L, Iannaccone J. 2022. Molt patterns and age and sex determination criteria for selected landbirds in an urban area of the Peruvian Central Coast. *Caldasia* 44(1): 165-177. doi: <https://doi.org/10.15446/caldasia.v44n1.84650>

**Appendix S1.** Representative images of different plumages of the Croaking Ground Dove (*Columbina cruziana*) captured in an urban area from the west coast of Lima, Peru. Each colored line insert represents one feather generation: red = juvenile, black = formative/basic. Codes represent band numbers. a First basic (juvenile) plumage (unknown sex, 29/05/19). b comparison of iris and bill color between a

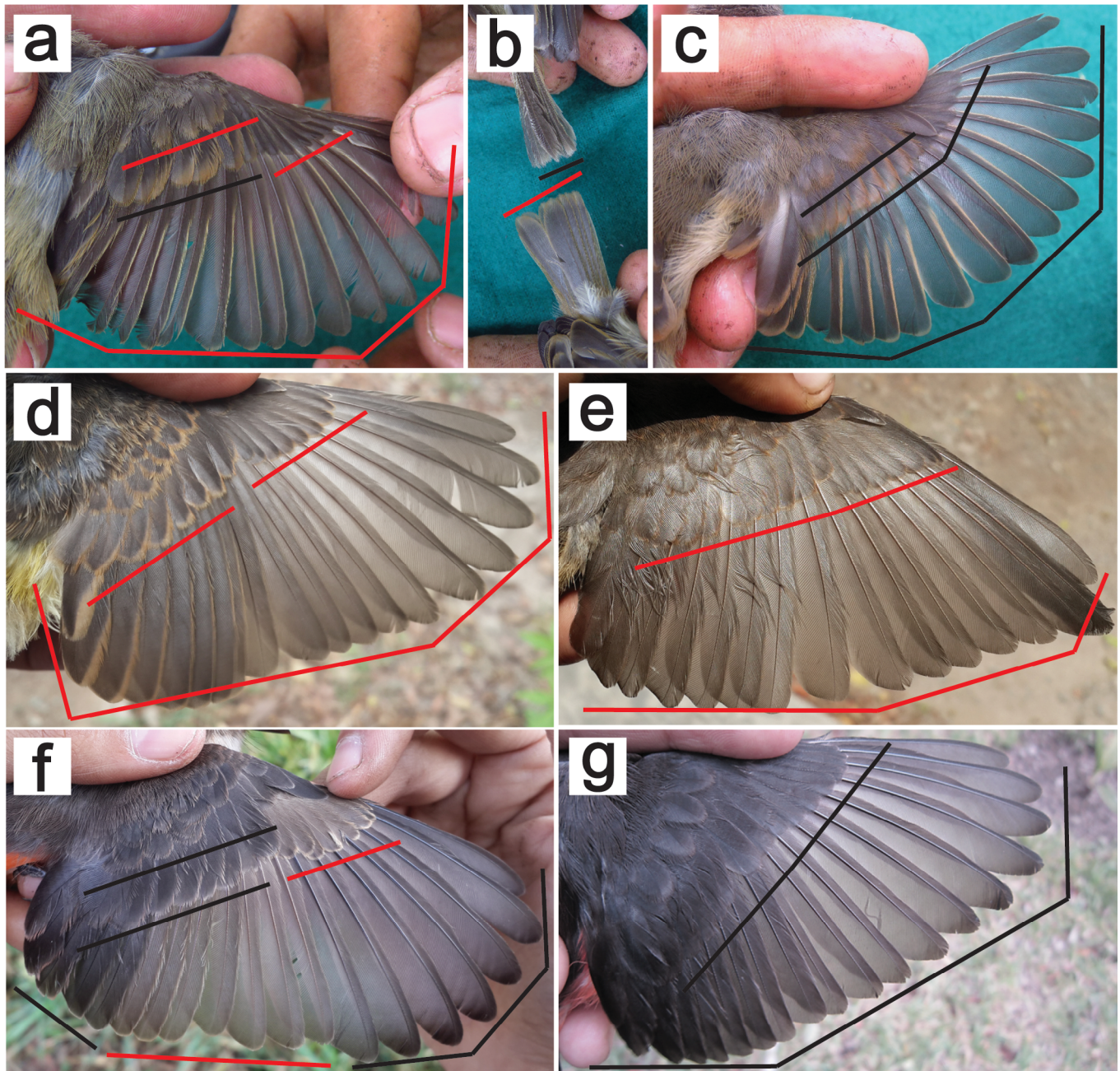
first basic (juvenile) plumaged individual (unknown sex, 29/05/19) and a formative-plumaged individual (male, 20/05/18). c Comparison of rectrices between a first basic (juvenile) plumaged individual (unknown sex, 29/05/19) and an after first-cycle juvenile (female, 26/10/14). d Formative plumage (male, 20/05/18). e) After first-cycle juvenile (female, 26/10/14).





**Appendix S2.** Representative images of different plumages of the Southern Beardless-Tyrannulet (*Camptostoma obsoletum*) and the Vermilion Flycatcher (*Pyrocephalus rubinus*) captured in an urban area from the west coast of Lima, Peru. Each colored line insert represents one feather generation: red = juvenile, black = formative, and white = alternate. Codes represent band numbers. **Southern Beardless-Tyrannulet (a-c):** a Formative plumage (unknown sex, 10/09/16). b Comparison

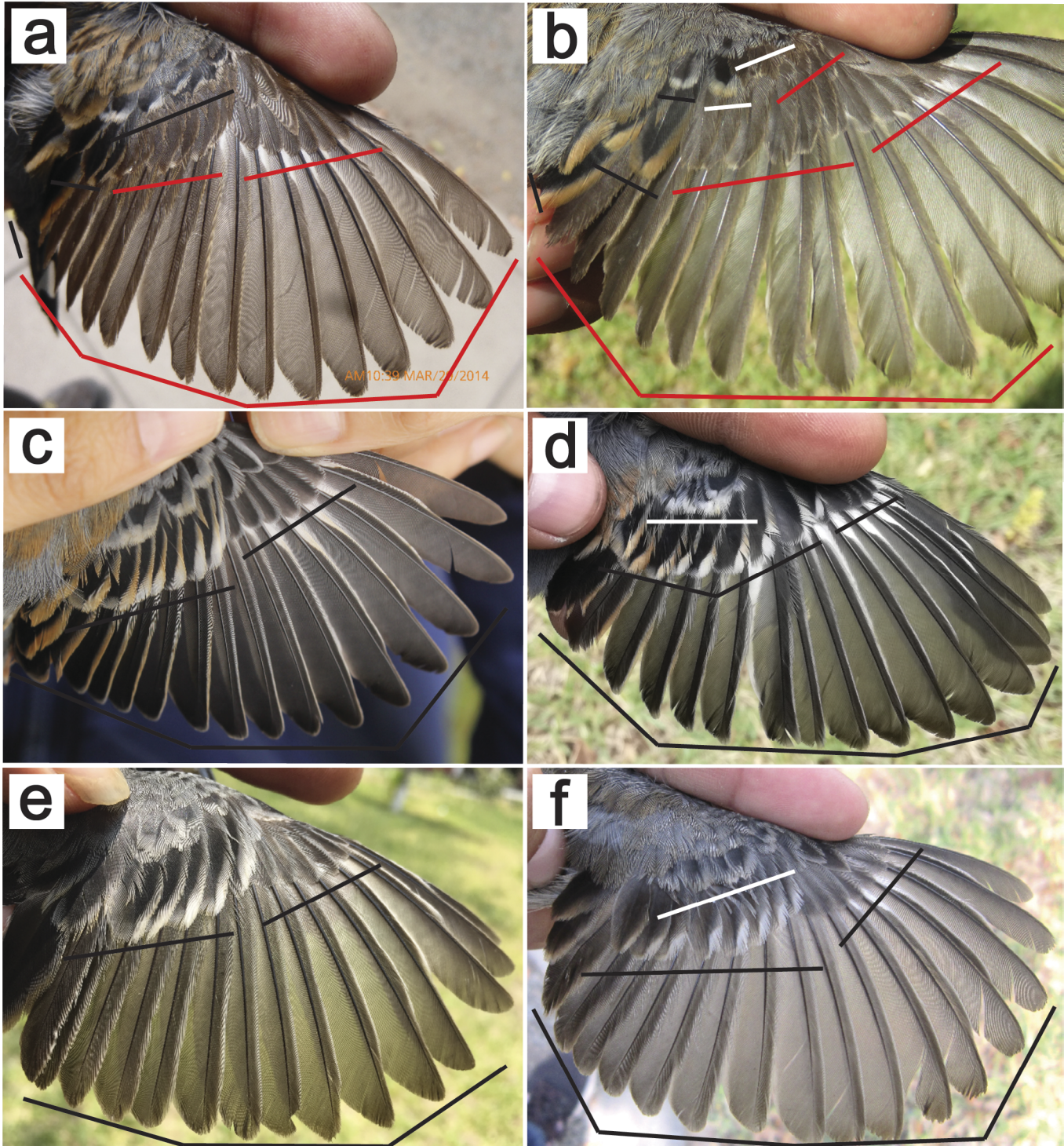
of rectrices between a formative-plumaged individual (unknown sex, 10/09/16) and a definitive basic-plumaged individual (unknown sex, 27/06/17). c Definitive basic plumage (unknown sex, 27/06/17). **Vermilion Flycatcher (d-g):** d First basic (unknown sex, juvenile) plumage (05/03/17). e First basic (juvenile) plumage, dark morph (unknown sex, 13/12/15). f Formative plumage (male, 24/05/15). g Definitive basic plumage (male, 17/09/17).





**Appendix S3.** Representative images of different plumages of the Band-tailed Seedeater (*Catamenia analis*) and Collared Warbling-finch (*Poospiza hispaniolensis*) captured in an urban area from the west coast of Lima, Peru. Each colored line insert represents one feather generation: red = juvenile, black = formative/basic and white = alternate. Codes represent

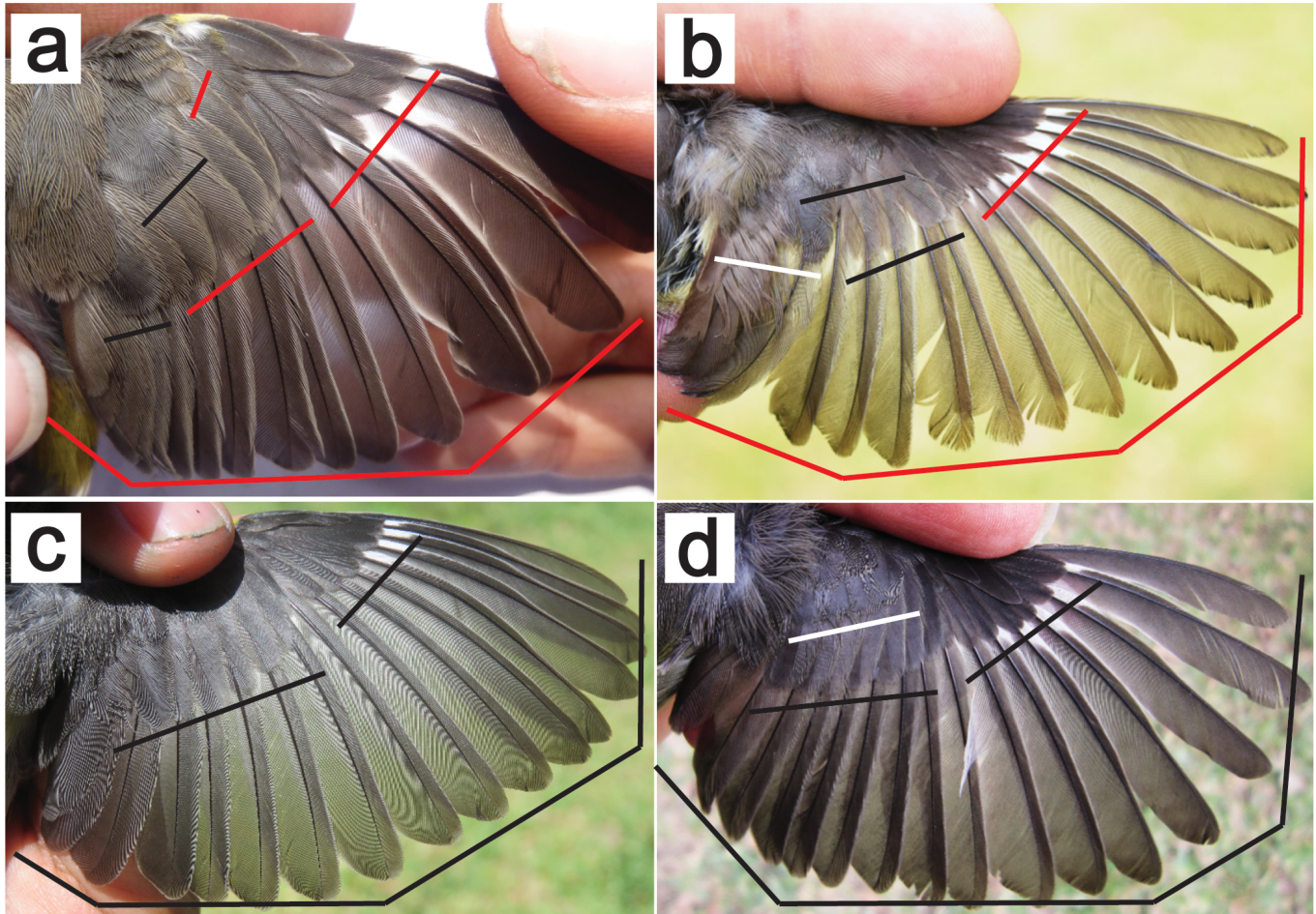
band numbers. **Band-tailed Seedeater (a-d):** a Formative plumage (male, 29/03/14). b First alternate plumage (male, 05/03/17). c Definitive basic plumage (male 25/09/16). d Definitive alternate plumage (male, 30/10/16). **Collared Warbling-finch (e-f):** e Definitive basic plumage (male, 09/01/19). f Definitive prealternate molt (male, 13/01/18).





**Appendix S4.** Representative images of different plumages of the Bananaquit (*Coereba flaveola*) captured in an urban area from the west coast of Lima, Peru. Each colored line/arrow insert represents one feather generation: red = juvenile, black = formative/basic and white

= alternate. **a** Formative plumage (unknown sex, 29/03/14). **b** First alternate plumage (unknown sex, 14/10/18). **c** Definitive basic plumage (unknown sex, 05/03/17). **d** Definitive alternate plumage (unknown sex, 09/09/18).





**Appendix S5.** Representative images of different plumages of the Blue-gray Tanager (*Thraupis episcopus quaesita*) captured in an urban area from the west coast of Lima, Peru. Each colored line/arrow insert represents one feather generation: red = juvenile, black = formative/basic

and white = alternate. **a** Formative plumage (unknown sex, 07/01/20). **b** First alternate plumage (unknown sex, 07/01/20). **c** Definitive basic plumage (unknown sex, 11/11/18). **d** Definitive alternate plumage (unknown sex, 26/10/14).

