The complete mitochondrial genome of Eurasian Sparrowhawk *Accipiter nisus* (Accipitriformes: Accipitridae)

Ki-Yoon Kim, Yung-Chul Park, Young-Jun Yoon and Kwang-Bae Yoon

*Division of Forest Science, College of Forest & Environmental Sciences, Kangwon National University, Chuncheon, Republic of Korea; Research Center for Endangered Species, National Institute of Ecology, Republic of Korea*

**ABSTRACT**

The mitogenome of the *Accipiter nisus* is a circular module of 18,352 bp, which consists of 39 genes, containing 2 rRNA genes (12S rRNA and 16S rRNA), 13 protein-coding genes, 22 tRNA genes, and two non-coding regions (control region and pseudo control region). The mitogenome of *A. nisus* is composed of 31.3% A, 25.5% T, 30.4% C, 12.8% G, and 76.3% AT. The phylogenetic analysis revealed that *A. nisus* individuals was well grouped in Accipitridae and more closely related to genus *Circus* than other *Accipiter* species.
Accipiter (Barrowclough, 2014), but Oatley et al. (2015) suggest that have no strong support in which lineages are the exact sister-group to the Circus clade.

Disclosure statement
No potential conflict of interest was reported by the authors.

ORCID
Yung-Chul Park http://orcid.org/0000-0002-5466-2339

Data availability statement
The data that support the findings of this study are openly available in GenBank of NCBI at https://www.ncbi.nlm.nih.gov, reference number MN929010.

References
Barrowclough GF, Groth JG, Lai JE, Tsang SM. 2014. The phylogenetic relationships of the endemic genera of Australo-Papuan hawks. J Raptor Res. 48(1):36–43.

Hervias SP, Gonzalez YG, Pereira EM, Vulcano A, Cabral RCSR, Coelho NG, Fagundes IC, Castello LB, Nunes MN, Gouveia CA, et al. 2017. The Eurasian Sparrowhawk of Macaronesia (Accipiter nisus granti): nesting territories, phenology, and breeding success on Madeira Island, Portugal. J Raptor Res. 51(1):15–24.

Hussain T, Ashraf I, Ahmed I, Ruby T, Ra faz M, Abdullah M, Akhtar S. 2016. Comparison of diet analysis of Eurasian Sparrowhawk, Accipiter nisus and Black Kite, Milvus migrans (Accipitridae: Accipitriformes) from Southern Punjab, Pakistan. Pak J Zool. 48:789–794.

Jones DT, Taylor WR, Thornton JM. 1992. The rapid generation of mutation data matrices from protein sequences. Comput Appl Biosci. 8(3):275–282.

Kearse M, Moir R, Wilson A, Stones-Havas S, Cheung M, Sturrock S, Buxton S, Cooper A, Markowitz S, Duran C, et al. 2012. Geneious Basic: an integrated and extendable desktop software platform for the organization and analysis of sequence data. Bioinformatics. 28(12):1647–1649.

Kumar S, Stecher G, Li M, Knyaz C, Tamura K. 2018. MEGA X: molecular evolutionary genetics analysis across computing platforms. Mol Biol Evol. 35(6):1547–1549.

Lehikoinen A, Saurola P, Byholm P, Lindén A, Valkama J. 2010. Life history events of the Eurasian sparrowhawk Accipiter nisus in a changing climate. J Avian Biol. 41(6):627–636.

National Institute of Biological Resources. 2019. National list of species of Korea; [accessed 2020 Feb 3]. http://kbr.go.kr

Oatley G, Simmons RE, Fuchs J. 2015. A molecular phylogeny of the harriers (Circus, Accipitridae) indicate the role of long distance dispersal and migration in diversification. Mol Phylogenet Evol. 85:150–160.

Rytkönen S, Kuokkanen P, Hukkanen M, Huhtala K. 1998. Prey selection by Sparrowhawks Accipiter nisus and characteristics of vulnerable prey. Ornis Fenn. 75:77–87.

Zhang H, Dou H, Yang X, Zhao C, Liu G, Zhang J. 2016. The complete mitochondrial genome sequence of the Sparrowhawk (Accipiter nisus). Mitochondrial DNA Part A. 27(3):1648–1649.