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**Speciation process in *Callosciurus* squirrels in the Indochina Peninsula: Does the ‘riverine barrier hypothesis’ explain their evolutionary history?**

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To test the riverine barrier hypothesis in *Callosciurus* squirrels, I examined the phylogenetic relationships between *C. caniceps* and *C. inornatus* geographically isolated in the northern part of the Indochina Peninsula and between *C. finlaysonii* and *C. erythraeus griseimanus* parapatrically occurring in the southern part of the Indochina Peninsula. This study compared complete mitochondrial DNA cytochrome *b* gene sequences of these four squirrels and three other *Callosciurus* species: *C. nigrovittatus*, *C. notatus*, and *C. prevostii*. Phylogenetic trees showed three main lineages: 1) a lineage containing *C. caniceps*, *C. erythraeus*, *C. finlaysonii*, and *C. inornatus*; 2) a *C. notatus* lineage; and 3) a lineage containing *C. nigrovittatus* and *C. prevostii*. *Callosciurus caniceps* was most closely related to *C. inornatus*; their ancestors may have diverged by a drastic eastward shift of the Mekong River. *Callosciurus erythraeus griseimanus* was more closely related to *C. finlaysonii* rather than to the other *C. erythraeus* population, showing that the classification of *C. erythraeus* and *C. finlaysonii* remains unclear. *Callosciurus erythraeus griseimanus* and *C. finlaysonii*

may have been geographically separated from each other by formation of the Mekong River. Based on these two phylogeographical results, I show how the riverine barrier hypothesis explains speciation in *Callosciurus* squirrels in the Indochina Peninsula.