

## B103

The studies on Geographical Song Variation and Song Dialect of the *Cettia diphone* in Korea.

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The stereotyped songs of the Quelpart Bush warbler's (*Cettia diphone cantans* and *Cettia diphone borealis*) males were recorded at Cheju island and southern coastal areas and inland areas in Korea. Total 637 songs of *Cettia diphone* in 62 males were recorded. We identified ten large and relatively homogeneous populations with discrimination function analysis. Their songs were analysed in differences and commons of interindividual, interpopulation, interlocality by sonagram and computer interface data processing.

The song of *Cettia diphone* consists of distinct sound sequences. A full song starts with a whistle portion from one to fifteen powerful and low frequency sound elements (notes) and ends with a complex syllable portion of complication, sounds covering a broad frequency range.

We could identified differences in interindividual, interpopulation and interlocalities with quantity factors of eight and analysis of syllables features. But, we couldn't identified song dialect of *Cettia diphone* clearly.

## B104

Comparison experiment in the response of individual discrimination (Neighbor and Stranger discrimination) of Yellow-throated Bunting (*Emberiza elegans*) and Gray-headed Bunting (*E. fucata*) to playback of song.

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The songs of Yellow-throated Bunting (*Emberiza elegans*) (n=9) and Gray-headed Bunting (*Emberiza fucata*) (n=5), in allopatric populations during the each breeding season in Gangnae-meon, Cheongwon-gun, Chungbuk in Korea, were recorded, analysed in sound spectrographs and tested in the field. Playback experiments were conducted in regular boundary of each species' territory and territory owners were stimulated to sing by means of natural, artificial song. In addition, *E. fucata* was stimulated by the song of individual specific section (the anterior section of song) and the other section (the posterior section of song).

The each male of *E. elegans* (n=5) was able to discriminate individually between neighbor and stranger to natural songs, but each males didn't response to playback of the artificial songs of neighbor and stranger. *E. fucata* (n=4) was able to discriminate individually between neighbor and stranger of each testing bird to natural song, artificial song, anterior section of song. On the other hand each males didn't response to playback of the posterior section of song.

One male of *E. fucata* was recorded solo songs, songs of interaction response to playback of stranger natural song and stranger artificial song. Each recorded songs were analysed in sound spectrographs and compared with song durations, song intervals of each occasion. The song duration of each trial could identify to significant difference.