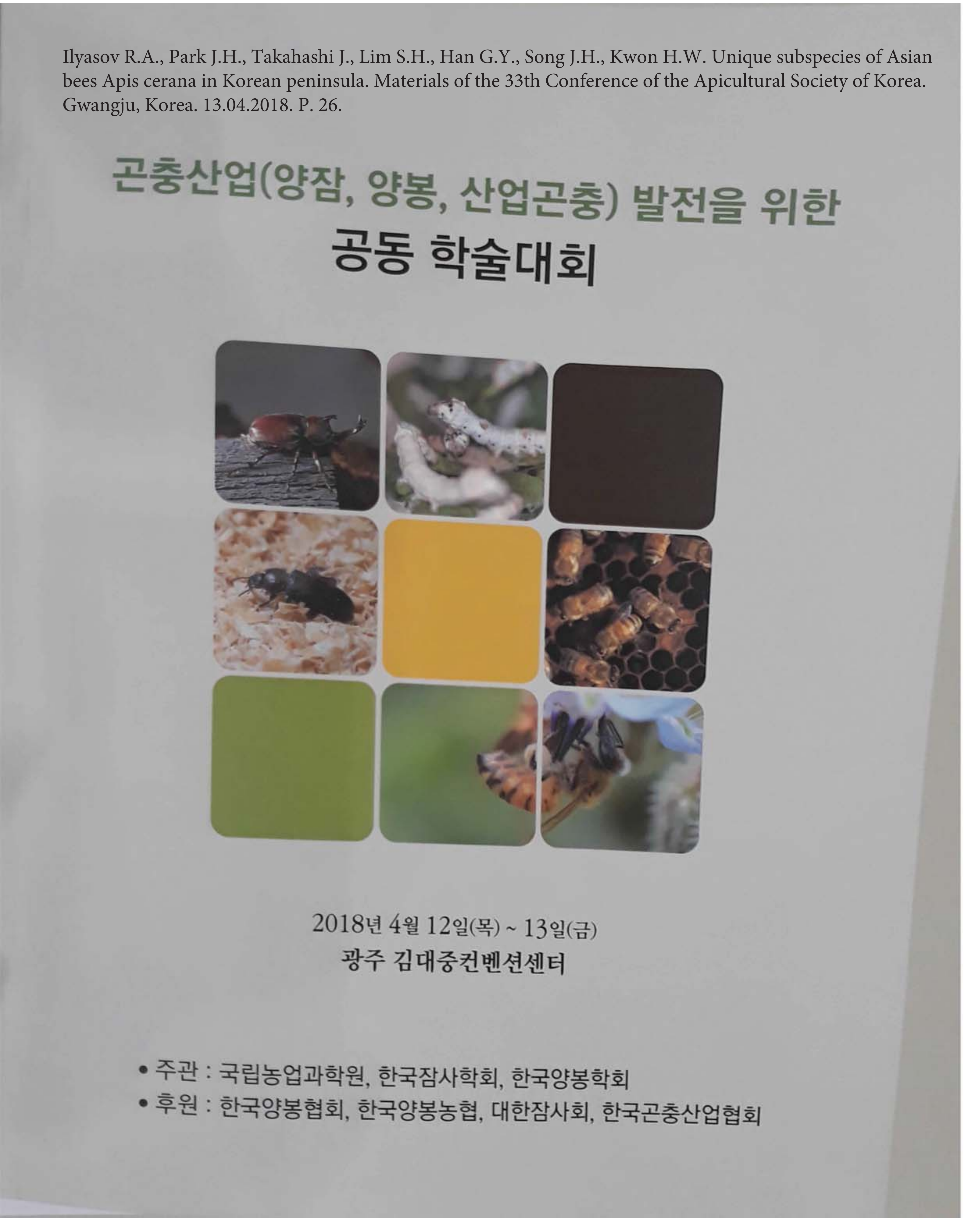
Ilyasov R.A., Park J.H., Takahashi J., Lim S.H., Han G.Y., Song J.H., Kwon H.W. Unique subspecies of Asian bees Apis cerana in Korean peninsula. Materials of the 33th Conference of the Apicultural Society of Korea. Gwangju, Korea. 13.04.2018. P. 26.



곤충산업(양잠, 양봉, 산업곤충) 발전을 위한

공동 학술대회

2018년 4월 12일(목) ~ 13일(금)
광주 김대중컨벤션센터

- 주관 : 국립농업과학원, 한국잠사학회, 한국양봉학회
- 후원 : 한국양봉협회, 한국양봉농협, 대한잠사회, 한국곤충산업협회

2018년 4월 13일 (금)

08:30~09:00	등 록

특별강연 〈한국양봉학회 305호〉

|좌장| 윤병수(경기

09:00~09:25	**프로폴리스 등 양봉산물 다양화** : 이용림(비엔케어)
09:25~09:50	**Unique subspecies of Asian bees *Apis cerana* in Korean peninsula** : Rustem Ilyasov(인천대)
09:50~10:00	휴식

일반학술발표 구두발표 〈한국양봉학회 305호〉

|좌장| 이승환(서울

10:00~10:15	**Accurate identification of Israeli acute paralysis virus by multi detection points using ultra-rapid real-time PCR** : A-Tai Truong(경기대)
10:15~10:30	**Responses of the small hive beetle (*Aethina tumida*) to volatile chemicals reported from honey bee (*Apis mellifera*) and beehive-materials, and solvent extracts of fermented pollen dough** : Aman Dekebo(안동대)
10:30~10:45	**한국 벌꿀 시장의 소비자 인식 및 구매행태 분석** : 강동윤(서울대)
10:45~11:00	**3 point PCR을 이용한 Black Queen Cell Virus의 특이적 검출법** : 김소민(경기대)
11:00~11:15	**봉군의 환경을 대변하는 봉변; 꿀벌 주요 Virus성 병원체의 검출** : 김정민(경기대)
11:15~11:30	**남부권역 유망 밀원수종 개화 특성** : 김영기(산림과학원)
11:30~12:00	시상 및 폐회식

박사학위 논문발표 〈한국잠사학회 302호〉

|좌장| 김성곤(강릉원주

09:00~09:30	**Molecular phylogeny of Bombycoidea and Lasiocampoidea and familial relationships within Bombycoidea using complete mitochondrial genome sequences** : 김민지(전남대)

일반학술발표 구두발표 〈한국잠사학회 302호〉

|좌장| 김성곤(강릉원주

09:30~09:45	**실크 매트릭스에 의한 골재생 효과 관련 임상 시험** : 석현(충남대)
09:45~10:00	**CRISPR/Cas 9 mediated genome editing of BmCactus in *Bombyx mori* cells** : 박종우(농과원)
10:00~10:15	**Identification of Flavonoids in Korean Mulberry Fruits** : 권오철(농과원)

Unique subspecies of Asian bees *Apis cerana* in Korean peninsula

Rustem Ilyasov[1,2], Jun Hyung Park[3], Jun-ichi Takahashi[4], Soo Ho Lim[1,2],
Gi Youn Han[1,2], Jong Hun Song[1,2] and Hyung Wook Kwon[1,2,*]
[1]Division of Life Sciences, Major of Biological Sciences, Incheon National University
[2]Convergence Research Center for Insect Vectors, Incheon National University
[3]Bioinformatics company 3BIGS CO.LTD
[4]Faculty of Life Sciences, Kyoto Sango University

Apis cerana is sisterly related to a honeybee species *Apis mellifera*, which is highly important in agriculture in most Asian countries. The size of *A. cerana* population is decreasing every year due to Korean Sacbrood Virus (KSBV) and other diseases. It is believe that *A. cerana* populations are subdivided into several numbers of subspecies adapted t different climates, similar to *Apis mellifera*. Full mitochondrial genome of *A. cerana* fron different countries and populations have been studied insufficiently. To date, full mitochondria DNA (mtDNA) sequence of *A. cerana* from Korean peninsula have not been researched. Her we sequenced and annotated the full mitochondrial genome of *A.cerana* from Jeollanam-d province of South Korea, which is most densely populated area of *A. cerana*. Th mtDNA sequence consisted of 15,925 bp length, A + T content 84% and C + G conter 16% and contains 22 tRNA genes, 13 protein-coding genes, 2 ribosomal RNA genes, AT-rich region, and 4 known non-coding intergenic loci (NC1-4). Comparative analysis *A. cerana* full mtDNA sequences showed that Korean *A. cerana* was more similar wit Japanese and Chinese samples than Taiwanese species. Japanese and Korean samples wer subdivided in one common group located separately. Thus, based on analysis of full mtDN sequences the samples of Korean *A. cerana* can be named as subspecies *Apis ceran koreana*.

포스터 ( ), 구두발표 (O)

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