

**Abstracts of Papers Presented During the
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Abstracts:

Latitudinal Distribution of Obligate Parasitic Behavior in Bees, Wasps, and Ants.—WILLIAM T. WCISLO. Department of Entomology, University of Kansas, Lawrence, KS 66045.

In *all* zoogeographic regions there are individuals which display occasional parasitic behavior within populations of nest-making (free-living) bees, wasps, and ants (Hymenoptera, Aculeata). Under certain social and environmental conditions, these facultatively parasitic females steal nests, provisioned cells, or worker labor ("parental effort") from more industrious con- or hetero-specific individuals.

In contrast, *species* with obligate parasitic habits and associated morphological modifications are relatively more abundant in temperate regions. E. O. Wilson has described these distributions as "a paradox for the last 180 years," suggesting they are an artifact of less thorough collecting in tropical areas.

A review from the literature of 114 faunal surveys of bees (Apoidea) quantitatively examines the geographic distributions of free-living and obligately parasitic bees. For these surveys the linear correlation between {percentage of parasitic species} and {latitude of the area surveyed} is $r = 0.66$, with the percentage of obligate parasitic species increasing toward higher latitudes. Repeated collecting at the same localities suggests the observed distributions are not an artifact of poor collecting in certain regions.

Facultatively parasitic behavior becomes fixed as a species character more often in areas where nest-founding among potential hosts is strongly synchronized.

See Wcislo (1987) *Biol. Rev.* 62:515-543.

Effect of Sorghum Sprouting on Development of Stored Grain Insects and Larval Degermination of Kernels.—L. E. WONGO AND J. R. PEDERSEN. Department of Grain Science and Industry, Kansas State University, Manhattan, KS 66506.

The effect of sprouting severity in sorghum grain [*Sorghum bicolor* (L.) Moench.] on development of red flour beetle (RFB), *Tribolium castaneum* (Herbst); saw-toothed grain beetle (STGB), *Oryzaephilus surinamensis* (L.); lesser grain borer (LGB), *Rhyzopertha dominica* (F.); and rice weevil (RW), *Sitophilus oryzae* (L.), was investigated. Progeny development of *T. castaneum* and *O. surinamensis* increased with the degree of sprouting, but not that of *S. oryzae* or *R. dominica*. Another study compared susceptibility of sprouted and nonsprouted sorghum kernels to damage by larvae of two insects. Active, young, developing larvae of both *T. castaneum* and the Indianmeal moth, *Plodia interpunctella* (Hubner), degermed more sprouted than nonsprouted sorghum kernels.