

How to link CONSUME with TWOSEX

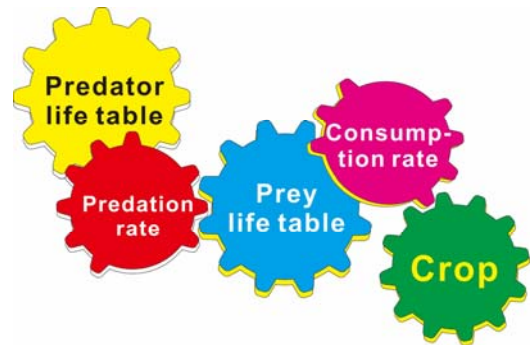
齊心教授
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Adjunct professor, National Chung Hsing University, Taiwan, Republic of China
Visiting professor, Northwest A&F University, China
Visiting professor, Fujian Agriculture and Forestry University, China

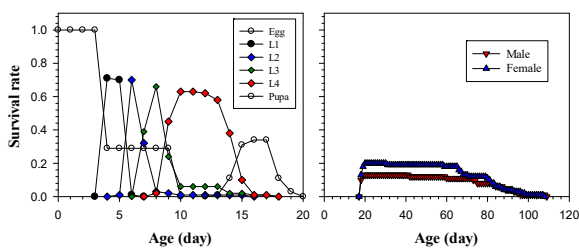
Life table is the most and only **comprehensive and correct** way to **describe** the survival and reproduction of a population. But ...

Life table theory is the most important basis of population ecology.

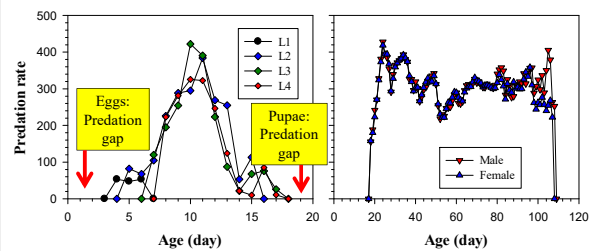
Application

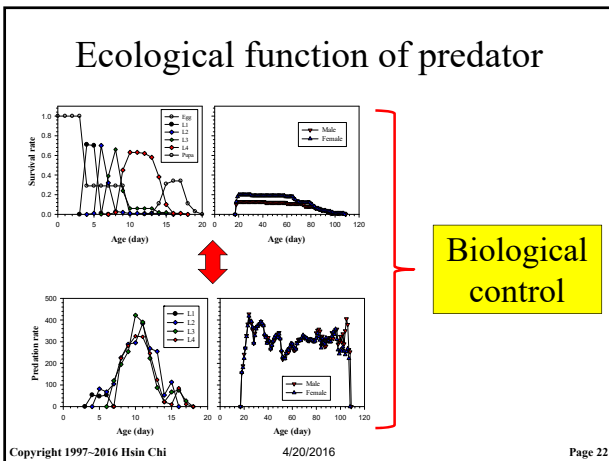


Life table describes the characteristics of a population itself



Predation study based on the age-stage, two-sex life table can describe the stage-specific predation rate





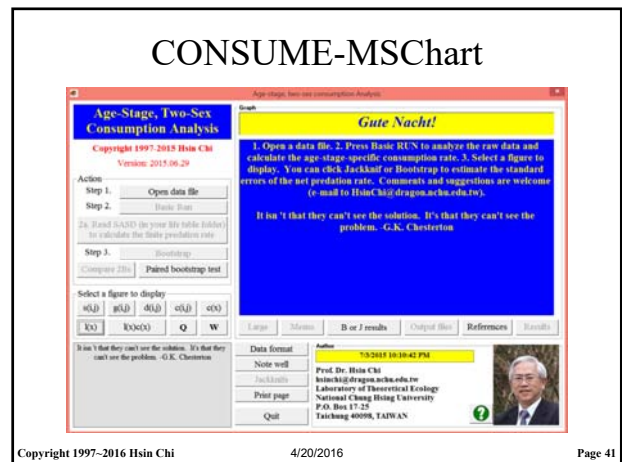
Consumption and predation rate analysis

CONSUME-MSChart

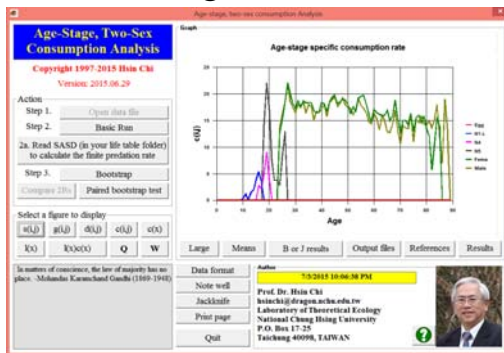
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CONSUME-MSChart can be used to analyze raw data of consumption (pests), predation (predators) and parasitism (parasitoids) rates.

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Congratulation!



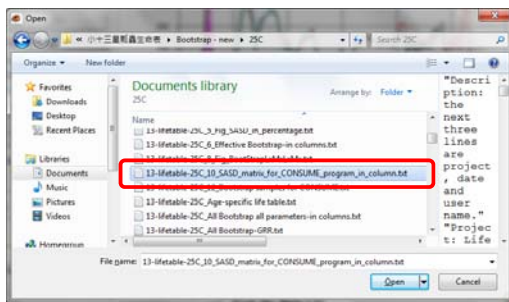
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Calculate finite predation rate



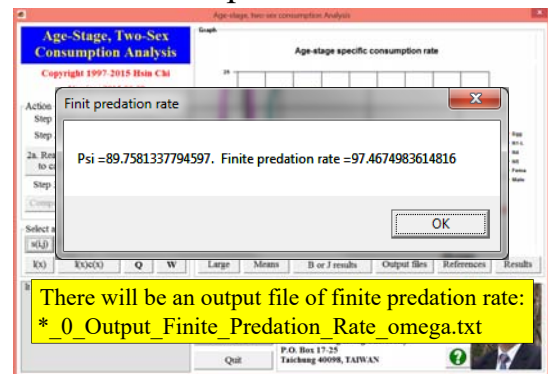
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Read SASD from life table folder
10_SASD_for_CONSUME



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Finite predation rate



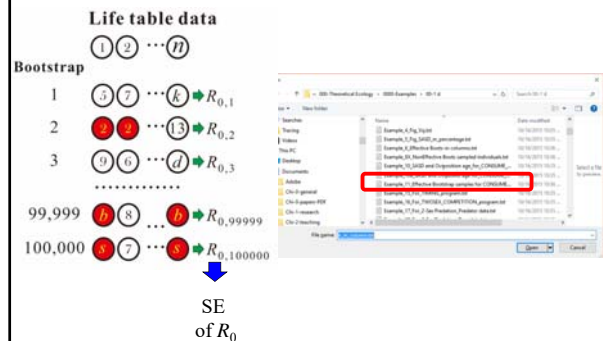
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How to link C_0 and R_0

- To estimate the standard error of Q_p , we need to use the same bootstrap samples (100,000 bootstraps) used by TWOSEX.
- TWOSEX** keeps all bootstrap samples in the file “_11_Bootstrap samples for CONSUME”

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TWOSEX will write all bootstrap samples in the file “_11_Bootstrap samples for CONSUME.txt”



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Bootstrap

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Use the same bootstrap samples?

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Use the same bootstrap samples File no. _11_Bootstrap samples (in life table folder)

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Bootstrap results

| | |
|------------------------------|------------------|
| Net rate (R ₀) = | 292.44 |
| Intrinsic rate (r) = | 0.13890558 |
| Finite rate = | 1.14742318 |
| Mean gen. time (T) = | 39.8846306393983 |

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Teşekkür ederim!

سپاسگزارم

謝謝!

ขอบคุณครับ

Děkuji

Danke!

¡Muchas gracias!

Thank you!

ご清聴ありがとうございます!

