



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.)

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Science Fair Use Only

S1811

Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)

**Short-Term Food Deprivation and Altered Foraging
Behavior in Avacularia avacularia**

Division

S Junior (6-8) S Senior (9-12)

Preferred Category (See page 5 for descriptions.)

18 - Zoology

Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.)

Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.

An experiment was conducted to determine the influence of short-term food deprivation on the altered foraging behavior in Avacularia avacularia (tarantula).

The experiment was conducted by using twelve adult French Guiana Pinktoe tarantulas, known to be a sit-and-wait predator. They were housed in separate two liter containers. Each was labeled one through twelve. They were grouped 1-4, 5-8 and 9-12. One day one of each experimental trial groups were fed. Three days later, groups 1-4 and 5-8 were observed for two hours in a dark room with the aid of a dim red light. Their behavior was recorded every fifteen minutes, noting any changes in position. 1-4 were then fed one cricket each. For another hour, the two groups were observed. This was repeated two days later when 5-8 were fed and 9-12 unfed. Then two days later 9-12 were fed and the other two groups were unfed.

Observations and statistics showed that the groups that remained unfed for longer periods of time engaged in increased displays of foraging behavior in comparison to the tarantulas who were fed more recently. The longer the period of food deprivation, the more the species displayed acts of foraging behavior.

Summary Statement (In one sentence, state what your project is about.)

An experiment was conducted to determine the influence of short-term food deprivation on the altered foraging behavior in Avacularia avacularia (tarantula), known to be a sit-and-wait predator.

Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.