

While minimized water loss, increased efficiency of oxygen uptake and delivery, and better supply of oxygen during activity of the hydraulic system, separately or combined, would be of sufficient adaptive value to explain the evolution of the tracheal system in arachnids, other advantages suggest themselves as well. Tracheae permit smaller body size, as they take less space than do localized booklungs. And, the tracheal system may be important in determining the centre of gravity in the aquatic spider, *Argyroneta aquatica*. Of course these are not alternative adaptations of tracheal systems; the system might be an adaptation to several factors.

Wigglesworth (1966, p. 23) has shown for insects that during growth and moulting, new tracheae and tracheoles grow out from the existing tracheal system, and the outgrowths are most abundant in regions deficient in oxygen supply. If this probably inherited characteristic is the case in arachnids also, then perhaps the tracheal system is in part a direct result of lack of oxygen in the prosoma, rather than a selected-for improvement. Experiments on arthropods' tissue cultures at different oxygen concentrations might provide a clue to the evolution of tracheae.

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Nomenclatural Note on *Argiope* Audouin

Opinion 1038 of the International Commission on Zoological Nomenclature ruled unanimously to validate the generic name *Argiope* Audouin, 1826 and to place it in the Official List of Generic Names in Zoology. The name *Argyope* has been placed, as an

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incorrect spelling, on the Official Index of Rejected and Invalid Generic Names in Zoology (*Bull. zool. Nom.* **32**(2): 105-109, June 1975). The case was submitted to the Office of the Secretary of the Commission in March 1967.

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