

Contrasting performances of generalist and specialist *Myzus persicae* (Hemiptera: Aphididae) reveal differential prevalence of maternal effects after host transfer

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Transgenerational maternal effects on performance (rm) after host transfer were evaluated in the generalist aphid *Myzus persicae* s.s., and in its subspecies specialized on tobacco, *M. persicae nicotianae* Blackman. We tested whether the performance of these taxa, when reared separately on optimal and suboptimal hosts (as sources of different maternal background) and then transferred to optimal hosts, experienced variations along four successive generations. Additionally, to compare the tolerance of both taxa to stress following host transfers, developmental instability (fluctuating asymmetry and body abnormalities) along the four generations was assessed. Taxon, rearing host, and generation affected the performance after host transfer. In the generalist, there was a significant improvement of rm along generations when transferred from suboptimal to optimal host and a significant decrease when transferred from optimal to optimal host; in the specialist, no increase or decrease occurred i