Appendix S1:
We used generalized linear mixed models with binomial error distributions and logit link functions (GLMER) to assess the effects of inoculation treatment, milkweed species, and CO_2 treatment on (a) the proportion of monarchs surviving to eclosion and (b) the proportion of monarchs inoculated that became infected.

Monarch Survival and Infection Success
Of the 534 experimental monarchs that we reared, 431 (81%) survived to adulthood. Within the 534 total monarchs, 305 were challenged with OE, and 228 of those survived to adulthood (75%). In contrast, 203 out of 229 (89%) uninoculated controls survived to adulthood. Overall, inoculation with the parasite decreased monarch survival to adulthood, by 15% (infection: $F_{1,523}$= 18.78, $p < 0.0001$). Monarch survival to adulthood was not influenced by milkweed species (milkweed species: $F_{3,523}$= 2.22, $p = 0.08$). Consuming milkweed grown under elevated CO_2 had no effect on monarch survival ($F_{1,523}$= 2.13, $p = 0.15$) and there were no significant interactions between milkweed host plant species and CO_2 treatment on survival either ($F_{3,523}$= 0.08, $p = 0.97$). Nor was there a combined interaction between infection, milkweed host plant species and CO_2 treatment on monarch survival ($F_{3,523}$= 0.87, $p = 0.46$).

Resistance to parasites is a combination of (a) resisting infection when challenged, (b) clearing infection after challenge, and (c) limiting parasite replication once infected (Best, White & Boots 2008). We can measure the combined effects of (a) and (b) by counting inoculated hosts that were free of infection at the adult stage. Of the 228 inoculated monarch larvae that survived to adulthood, 79 were infection-free (35%) at adulthood and 149 were infected (65%). However, this combined estimate of resistance was not influenced by our treatments; the proportion of inoculated larvae that were parasite free was unaffected by either milkweed species ($F_{3,217}$= 1.31, $p = 0.27$), CO_2 treatment ($F_{1,217}$= 0.01, $p = 0.91$) or their interaction ($F_{3,217}$= 0.24, $p = 0.87$).

All analyses in the main text are restricted to only those monarchs that survived to adulthood, including inoculated monarchs that hosted parasites, and uninoculated (control) monarchs (Sternberg 2012). All analyses of parasite burden were restricted to infected monarchs, but analyses of tolerance included both infected and uninfected monarchs.