



Figure S4 Standard paraquat resistance assay based on drug feeding revealed increased oxidative stress resistance of *Akh^A*, *Akh^{AP}* and *Akh^{R1}* mutants when compared to controls. **(A)** Assay conducted on males. Fischer exact test: *Akh^A* vs. control: $P < 0.001$; *Akh^{AP}* vs. control: $P < 0.001$; *Akh^{R1}* vs. control: $P < 0.001$; *Akh^A* vs. *Akh^{AP}*: $P > 0.05$; *Akh^A* vs. *Akh^{R1}*: $P < 0.001$; *Akh^{AP}* vs. *Akh^{R1}*: $P < 0.001$ ($n[Akh^A] = 97$, $n[Akh^{AP}] = 110$, $n[Akh^{R1}] = 81$, $n[control] = 98$). **(B)** Assay conducted on females. Fischer exact test: *Akh^A* vs. control: $P < 0.001$; *Akh^{AP}* vs. control: $P < 0.001$; *Akh^{R1}* vs. control: $P < 0.001$; *Akh^A* vs. *Akh^{AP}*: $P > 0.05$; *Akh^A* vs. *Akh^{R1}*: $P < 0.001$; *Akh^{AP}* vs. *Akh^{R1}*: $P < 0.001$ ($n[Akh^A] = 109$, $n[Akh^{AP}] = 81$, $n[Akh^{R1}] = 92$, $n[control] = 116$).