

Table 1 Studies testing for fitness costs of resistance to *Bt* maize by western corn rootworm (Adopted from Gassmann, 2021)

Type of resistance <sup>1</sup>	Strain	Resistant to toxin <sup>2</sup>	Cost present? <sup>3</sup>	Traits affected <sup>4</sup>
Laboratory selected	Brookings moderately selected	Cry3Bb1	No	-----
Laboratory selected	Brookings moderately selected (Strain 1)	Cry3Bb1	No	-----
Laboratory selected	Brookings moderately selected (Strain 2)	Cry3Bb1	No	-----
Laboratory selected	Brookings moderately selected (Strain 3)	Cry3Bb1	No	-----
Laboratory selected	Moderately selected (Strain 1)	Cry3Bb1	No	-----
Laboratory selected	Brookings moderately selected (Strain 2)	Cry3Bb1	No	-----
Laboratory selected	Data presented as composite of three resistant strains	CryBb1	Yes	Fecundity; adult (male) longevity
Laboratory selected	Brookings moderately selected	CryBb1	No	-----
Laboratory selected	Brookings moderately selected	CryBb1	Yes	Larval development; egg viability
Laboratory selected	mCry3A selected	mCry3A	No	-----
Laboratory selected	eCry3.1Ab selected	eCry3.1Ab	No	-----
Field evolved	Hopkinton	Cry3Bb1	No	-----
Field evolved	Cresco	Cry3Bb1	Yes	Larval development; survival to adulthood; fecundity
Field evolved	Elma	Cry3Bb1	Yes	Larval development
Field evolved	Monona	Cry3Bb1	No	-----
Field evolved	Cresco	Cry3Bb1	Yes	Decline in resistance over time
Field evolved	Hopkinton	Cry3Bb1	Yes	Decline in resistance over time
Field evolved	Data presented as composite of eight resistant strains	Cry3B1	Yes	Adult Size

Note: <sup>1</sup> Describes whether a strain was generated by selecting a susceptible strain on *Bt* maize in the laboratory (laboratory selected) or was generated from *Bt*-resistant insects collected from the field (field evolved). <sup>2</sup> Type of *Bt* maize on which the rootworm strain was selected and to which it was resistant. <sup>3</sup> States whether fitness costs of *Bt* resistant were detected for a specific strain in a study. <sup>4</sup> Life-history traits for which a fitness cost was detected or cases where resistance declined over time when a strain was not exposed to *Bt* maize (Adopted from Gassmann, 2021)