Treatment: Systemic bacterial infection

CO = CO2 control SW = Sterile wound control PR = *Providencia rettgeri* {Juneja:2009if} EF = *Enterococcus faecalis* {Lazzaro:2006dz}

# Survival:

**Day**: Day post infection for survival **PropAlive**: Proportion of the 10 individual flies alive for survival data

# Load:

**TechRep**: Replicate plate for bacterial load data **Load(log[count/mL])**: Bacterial load per fly estimated by number of colonies that grow after homogenization and plating

# **Natural Populations:**

Year: Year of collection (2012 or 2014)

Population: Geographic location of orchard from which the samples were collected.

MA = George Hill Orchard in Lancaster, MA (42.500493°N, -71.563580°E)

PA = Linvilla Orchards in Media, PA (39.884179°N, -75.411227°E)

VA = Carter Mountain Orchard in Charlottesville, VA (37.991851°N, -78.471630°E)

Season: Early/Spring collection in early July, Late/Fall collection in October

Line#: Unique line number within each Year x Population x Season

# **Recombinant Population Cages:**

**Tep3**: Fixed seasonal alleles in *Tep3* gene CT = 2L:7703202[C] & 2L:7705370[T] (both fall alleles) CG = 2L:7703202[C] & 2L:7705370[G]TG = 2L:7703202[T] & 2L:7705370[G] (both spring alleles)

**Dro6**: Fixed seasonal allele in *Dro6* gene

G = 3L:3334769[G] (spring allele) T = 3L:3334769[T] (fall allele) Not fixed = locus is not fixed in the starting population cage

## Fadd: Fixed seasonal alleles in *Fadd* gene

G = 3R:17861050[G] (spring allele) A = 3R:17861050[A] (fall allele) Not fixed = locus is not fixed in the starting population cage

**Tep3\_BiolRep**: Biological replicate for the *Tep3* recombination population cages started with an independent set of lines