



Fig S1: Chromosomal location of marker-trait associations.

- ◁ Resistance decreasing effect, single environment, $-\log_{10}(p)$ -value > 3.0
- ◁ Resistance decreasing effect, single environment, $-\log_{10}(p)$ -value > 4.82
- ◀ Resistance decreasing effect, BLUES-value, $-\log_{10}(p)$ -value > 3.0
- ◀ Resistance decreasing effect, BLUES-value, $-\log_{10}(p)$ -value > 4.82

- ◇ Resistance increasing effect, single environment, $-\log_{10}(p)$ -value > 3.0
- ◇ Resistance increasing effect, single environment, $-\log_{10}(p)$ -value > 4.82
- ◆ Resistance increasing effect, BLUES-value, $-\log_{10}(p)$ -value > 3.0
- ◆ Resistance increasing effect, BLUES-value, $-\log_{10}(p)$ -value > 4.82











