<u>Supplemental Table S3.</u> iBeetle phenotypes. Data is the percent of individuals with the defined mortality/morphology out of 10 individuals. Blank boxes indicate information was not available. Primers are those used in the RNAi screen (http://ibeetle-base.uni-goettingen.de; Dönitz et al., 2015).

LOC663066 B-like Primers: lef	: GGCAGAAACCGGAATTGTAA right: 0	GCTCTCAATCCCACATTCGT
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		Phenotype after larval injection				Phenotype after pupal injection				
	Egg Larvae Pupae Adult				Egg	Larvae	Pupae	Adult		
Mortality 11 days	-	0%	0%	0%	-	-	40%	40%		
Mortality 22 days	-	0%	0%	0%						
Fertility										
Morphology										

LOC656957 B-like Primers: left: TGTGGGTGTAAAGGGGGTTA right: TTCTTCTGTTCCCCACCCTA

		Phenotype after larval injection				Phenotype after pupal injection				
	Egg Larvae Pupae Adult				Egg	Larvae	Pupae	Adult		
Mortality 11 days	-	10%	10%	10%	-	-	0%	0%		
Mortality 22 days	-	10%	10%	10%						
Fertility										
Morphology										

LOC656198 B homolog Primers: left: GCCAATTATGGATGGAGTGC right: GGTCAACATTGGTCGGAAGT

· ·	Phenotype after larval injection				Phenotype after pupal injection				
	Egg	Larvae	Pupae	Adult	Egg	Larvae	Pupae	Adult	
Mortality 11 days	-	0%	0%	0%			0%	0%	
Mortality 22 days	-	20%	20%	20%					
Fertility									
Morphology				Eclosion not fulfilled	No cuticle (30%)	Irregular musculature (50-80%)			

LOC657117 B homolog Primers; left: CAAGCGACCCAAAACGTAAT right: ATAGACATCGAAGGCGGCTA

	Phenotype after larval injection				Phenotype after pupal injection				
	Egg	Larvae	Pupae	Adult	Egg	Larvae	Pupae	Adult	
Mortality 11 days	-	0%	0%	0%	-	-	10%	10%	
Mortality 22 days	-	0%	0%	0%	-	-			
Fertility									
Morphology								Eclosion not fulfilled	

LOC663145 B Primers: left: GGCAGAAACCGGAATTGTAA right: GCTCTCAATCCCACATTCGT

	Phenotype after larval injection				Phenotype after pupal injection				
	Egg	Larvae	Pupae	Adult	Egg	Larvae	Pupae	Adult	
Mortality 11 days	-	0%	0%	0%	-	-	10%	10%	
Mortality 22 days	-	0%	0%	0%	-	-			
Fertility									
Morphology					Without cuticle				
					(30-50%)				

LOC663090 B Primers: left: GATACATGATGGCTGCGTTC right: CAATCCCACATTCATTTTTGC

LOCOUSO70 D I IIIIICIS. IC	it. GHIRCE	10/1100010001	TO Hight. CHATTEE	CHCHIICHIII	100				
		Phenotype	after larval injection		Phenotype after pupal injection				
	Egg Larvae Pupae Adult Eg				Egg	Larvae	Pupae	Adult	
Mortality 11 days	-	0%	0%	0%	-	-	0%	0%	
Mortality 22 days	-	0%	0%	0%	-	-			
Fertility									
Morphology	_								

LOC660368 L Primers: left: AGTACTGGCGCCATTGAATC right: CCCTTATTCCTGGCGATTTT

		Phenotype	after larval injection	l .	Phenotype after pupal injection			
	Egg	Larvae	Pupae	Adult	Egg	Larvae	Pupae	Adult
Mortality 11 days	-	100%	100%		-	-	10%	10%
Mortality 22 days	-	100%	100%	100%	-	-		
Fertility								Vitellarium thinner (40%) Vitellogenic egg chamber not present (40%) Previtellogenic egg chamber mostly not present (40%)
Morphology								

LOC659226 L Primers: left: CCACAAAGTCGCCAAACATA right: CATTTCTCGTCTTCGGCTTT

	Phenotype after larval injection				Phenotype after pupal injection				
	Egg	Larvae	Pupae	Adult	Egg	Larvae	Pupae	Adult	
Mortality 11 days	-	20%	20%		-	-	0%	0%	
Mortality 22 days	-	30%	30%	30%	-	-			
Fertility				30%					
Morphology			Eclosion delayed	No living offspring	No cuticle (50- 80% Not fertilized (30%)		Later than schedule		