

Supplementary

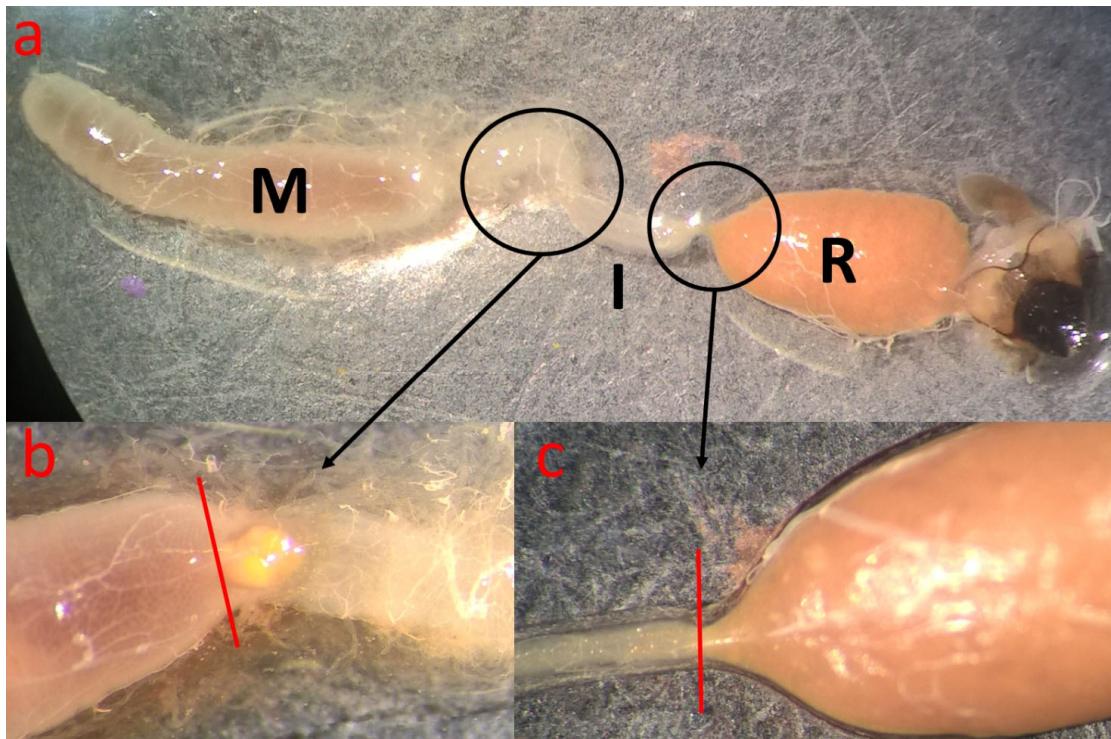


Figure S1. Dissection scheme (a) whole gut, (b) the transition between the middle stomach and ileum, and (c) transition between the ileum and the rectum. Red streaks indicate areas cut. M = Mid stomach, I = ileum and R = rectum.

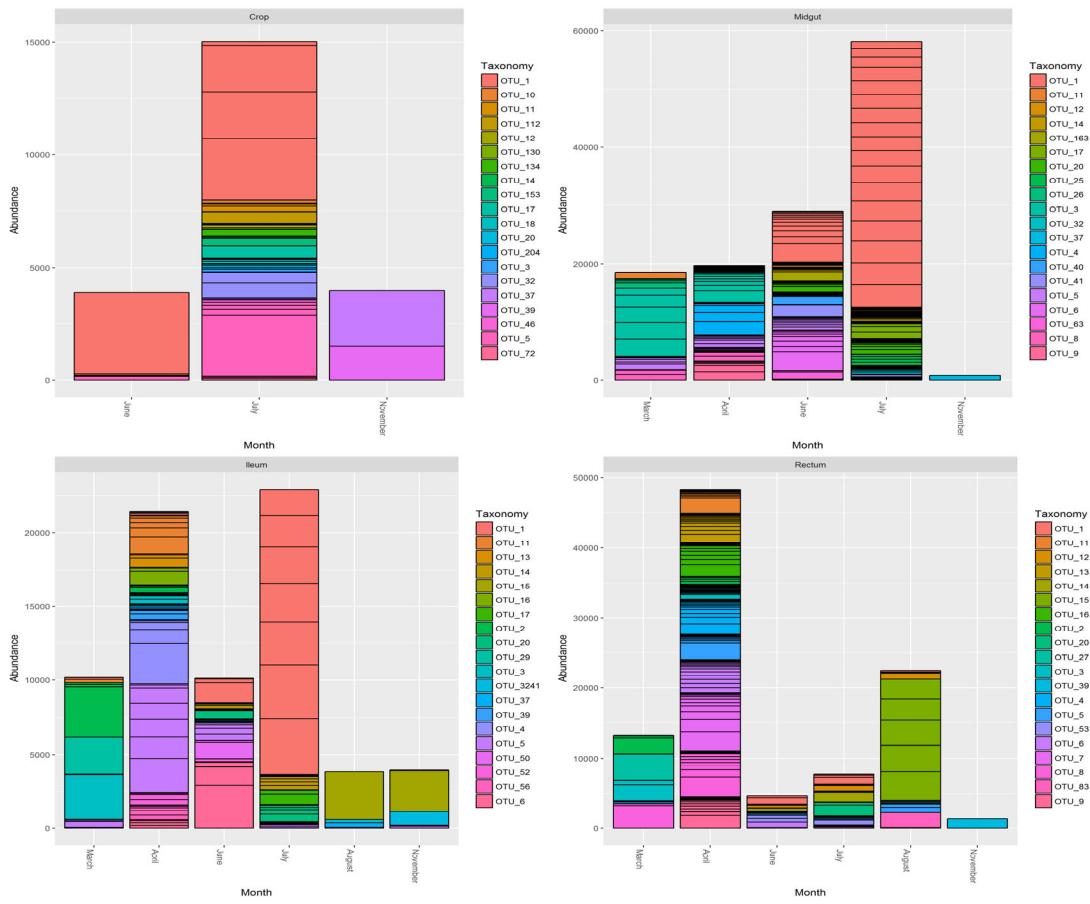


Figure S2. Relative abundance of the 20 most abundant fungal OTUs across months per gut part. Taxonomic assignments are provided in Table S1.

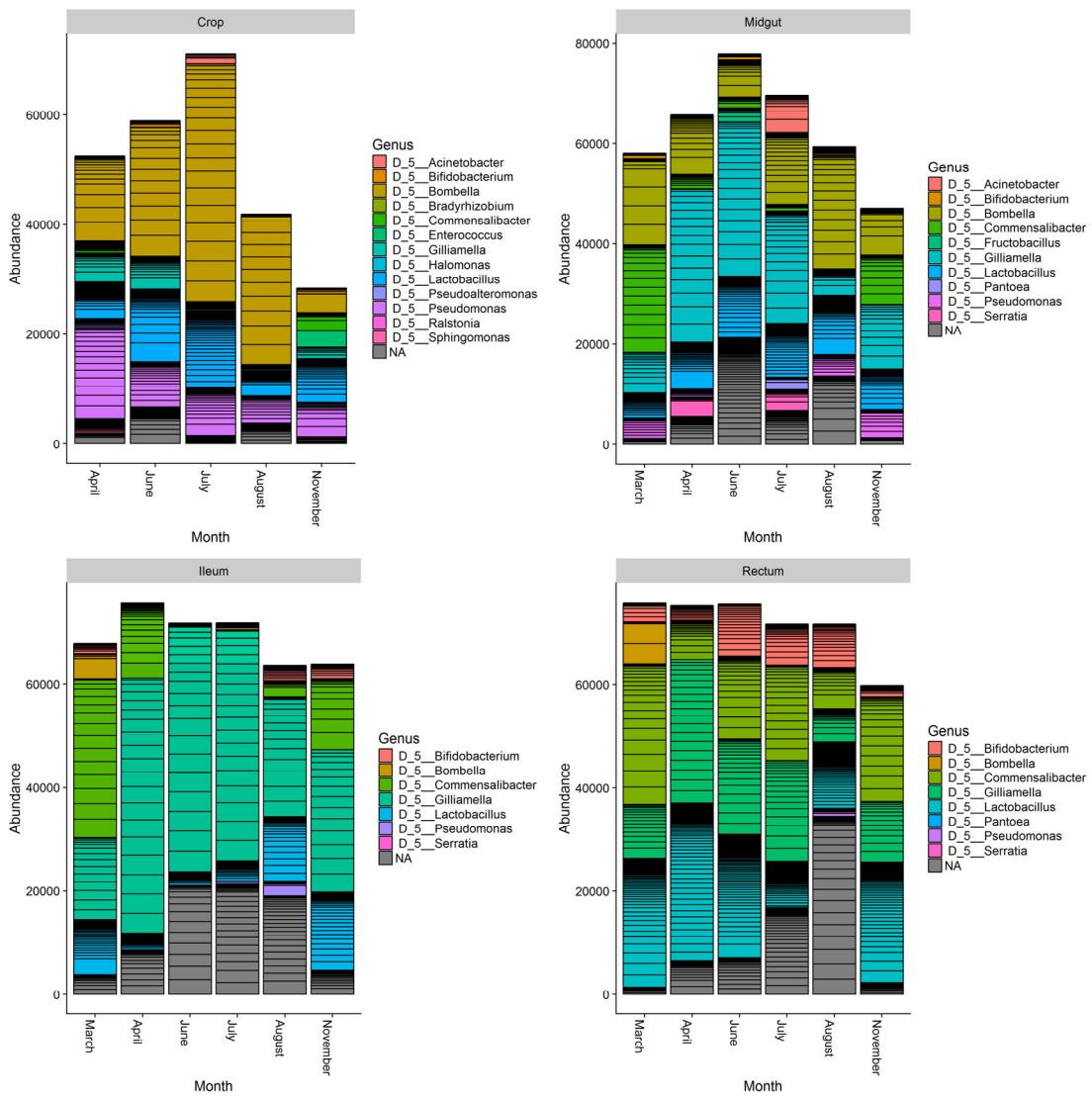


Figure S3. Relative abundance of the bacterial OTUs (with abundance > 1%) across months per gut part. The color code is given at the genus level.

Table S1. Taxonomic assignments of fungal OTUs by Blast.

OTU#	Taxonomy by blast nt collection 11/11/2020	Phylum	Accession#
OTU_1	<i>Aureobasidium pullulans</i>	Ascomycota	MW085051
OTU_2	<i>Meyerozyma guilliermondii</i>	Ascomycota	MT988167
OTU_3	<i>Starmerella apicola</i>	Ascomycota	KY101940
OTU_4	<i>Debaryomyces hansenii</i>	Ascomycota	MW051606
OTU_5	<i>Engyodontium sp.</i>	Ascomycota	MN905797
OTU_6	<i>Mrakia sp.</i>	Basidiomycota	MT505696
OTU_7	<i>Tausonia pullulans</i>	Basidiomycota	MN900123
OTU_8	Unknown		
OTU_9	Unknown		
OTU_10	<i>Penicillium corylophilum</i>	Ascomycota	MT906500
OTU_11	<i>Penicillium sp.</i>	Ascomycota	MT993349
OTU_12	<i>Cladosporium sp.</i>	Ascomycota	MW077705
OTU_13	<i>Phaffia rhodozyma/Xanthophyllomyces dendrophous</i>	Basidiomycota	KY104501/DQ904243
OTU_14	<i>Filobasidium wieringae</i>	Basidiomycota	MN899199
OTU_15	<i>Hanseniaspora uvarum</i>	Ascomycota	MN556596
OTU_16	<i>Mrakia gelida</i>	Basidiomycota	MN460370
OTU_17	Uncultured fungus clone		MK717974
OTU_18	<i>Cladosporium allicinum</i>	Ascomycota	MT974153
OTU_20	<i>Taphrina carpini</i>	Ascomycota	MK782181
OTU_25	<i>Papiliotrema flavescens</i>	Basidiomycota	MN427970
OTU_26	Unknown		
OTU_27	<i>Skoua fertilis</i>	Ascomycota	LR585992
OTU_29	<i>Talaromyces sp.</i>	Ascomycota	LT906538
OTU_32	<i>Curvibasidium cygneicollum</i>	Basidiomycota	KY102979
OTU_37	<i>Malassezia restricta</i>	Basidiomycota	KX192381
OTU_39	<i>Cladosporium dominicanum/Malassezia globosa</i>	Basidiomycota	MW157775/MH09375 7
OTU_40	<i>Monilia laxa</i>	Ascomycota	MT156091
OTU_41	<i>Claviceps purpurea</i>		MF462230
OTU_46	<i>Taphrina padi</i>	Ascomycota	AF492104
OTU_50	<i>Neocucurbitaria acerina</i>	Ascomycota	MN251058
OTU_52	<i>Aspergillus conicus</i>	Ascomycota	MN898503
OTU_53	<i>Mucor hiemalis</i>	Zygomycota	MT514370
OTU_56	<i>Penicillium adametzii</i>	Ascomycota	MT601880
OTU_63	<i>Crocicreas amenti</i>	Ascomycota	FJ005092
OTU_72	Uncultured Ascomycota	Ascomycota	FR682219
OTU_112	<i>Entomophthora sp</i>	Zygomycota	GQ285871
OTU_130	<i>Vishniacozyma victoriae</i>	Basidiomycota	MN897983
OTU_134	<i>Entomophthora grandis</i>	Zygomycota	GQ285863
OTU_153	<i>Melampsora sp.</i>	Basidiomycota	KF780843
OTU_163	<i>Zygosaccharomyces mellis</i>	Ascomycota	AY046190
OTU_204	<i>Curvibasidium rogersii</i>	Basidiomycota	JX188232
OTU_324	<i>Hanseniaspora uvarum</i>	Ascomycota	MH595382