

## Supplementary Data

**Table S1.** Ontologies/ medicinal plants, chemical compounds, pathogens, and diseases, used in experiment.

Traits	ATOL*, AHOL**, OPL***, IPNI****, and ChEBI*****	
	References	
Medicinal plants used	<i>Calendula officinalis</i> L	187894-1
	<i>Satureja hortensis</i> L.	457680-1
Chemical compounds detected	Polyphenols (µg/mL)	26195
	Tocopherols (ng/mL)	135821
	Methoxylated flavones (ng/mL)	25241
	Sterols (µg/mL)	15889
Parasite load traits	Parasite Oocysts (OPG)	Oocyst Stage
	Parasite Cysts	Cyst Stage
	Parasite Eggs (EPG)	Egg Stage
Parasite used	<i>Eimeria</i> spp.	AHOL_0004070
	<i>Balantioides coli</i>	AHOL_0004016
	<i>Ascaris suum</i>	AHOL_0004179
	<i>Trichuris suis</i>	AHOL_0004186
	<i>Oesophagostomum</i> spp.	AHOL_0004181
	<i>Cryptosporidium</i> spp.	AHOL_0004175
Disease description	Ascariidiosis	AHOL_0005382
	Coccidiosis	AHOL_0005374
	Cryptosporidiosis	AHOL_0005377

\*Traits in reference to the ontology ATOL: <https://www.atol-o.com/en/atol-2/>; \*\*Traits in reference to the ontology AHOL: <https://www.atol-ontology.com/ahol/>; \*\*\* Ontology for Parasite Life cycle: [http://wiki.aiisc.ai/index.php/Ontology\\_for\\_Parasite\\_Life\\_Cycle](http://wiki.aiisc.ai/index.php/Ontology_for_Parasite_Life_Cycle); \*\*\*\* International Plant Names Index-IPNI : <https://www.ipni.org/p/3>; \*\*\*\*\* Chemical Entities of Biological Interest-ChEBI: <https://www.ebi.ac.uk/chebi/>.

**Table S2.** The prevalence (P) at 0, 14 and 28 days in weaners.

<b>F1</b>						
	<b>C (0)</b>	<b>CO (0)</b>	<b>C (14)</b>	<b>CO (14)</b>	<b>C (28)</b>	<b>CO (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	20	30	40	10	50	20
<i>B. coli</i>	80	80	100	30	100	50
<i>Cryptosporidium</i> spp.	20	20	20	10	30	20
	<b>C (0)</b>	<b>SH (0)</b>	<b>C (14)</b>	<b>SH (14)</b>	<b>C (28)</b>	<b>SH (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	60	70	50	20	40	20
<i>B. coli</i>	90	100	80	10	90	30
<i>Cryptosporidium</i> spp.	20	30	20	30	10	10
<b>F2</b>						
	<b>C (0)</b>	<b>CO (0)</b>	<b>C (14)</b>	<b>CO (14)</b>	<b>C (28)</b>	<b>CO (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	100	90	80	40	80	40
<i>B. coli</i>	80	90	90	30	100	90
<i>Oesophagostomum</i> spp.	40	50	50	20	40	30
<i>Cryptosporidium</i> spp.	20	30	20	20	10	10
	<b>C (0)</b>	<b>SH (0)</b>	<b>C (14)</b>	<b>SH (14)</b>	<b>C (28)</b>	<b>SH (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	80	90	70	20	80	20
<i>B. coli</i>	90	90	70	50	100	30
<i>Cryptosporidium</i> spp.	20	20	20	10	10	10

F=farm, C=control, SH=*S. hortensis*, CO=*C. officinalis*

**Table S3.** The prevalence (P), at 0, 14 and 28 days in fatteners.

<b>F1</b>						
	<b>C (0)</b>	<b>CO (0)</b>	<b>C (14)</b>	<b>CO (14)</b>	<b>C (28)</b>	<b>CO (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	20	30	40	20	50	30
<i>B. coli</i>	90	100	100	30	100	40
<i>A. suum</i>	40	40	30	30	40	20
	<b>C (0)</b>	<b>SH (0)</b>	<b>C (14)</b>	<b>SH (14)</b>	<b>C (28)</b>	<b>SH (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	30	40	40	10	50	20
<i>B. coli</i>	90	100	90	20	80	30
<i>A. suum</i>	80	90	100	40	100	20
<i>T. suis</i>	40	50	60	30	50	20
<b>F2</b>						
	<b>C (0)</b>	<b>CO (0)</b>	<b>C (14)</b>	<b>CO (14)</b>	<b>C (28)</b>	<b>CO (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	100	100	80	20	70	40
<i>B. coli</i>	70	80	80	40	90	70
<i>A. suum</i>	80	90	100	100	100	100
<i>T. suis</i>	90	90	80	80	60	50
	<b>C (0)</b>	<b>SH (0)</b>	<b>C (14)</b>	<b>SH (14)</b>	<b>C (28)</b>	<b>SH (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	80	80	70	10	70	30
<i>B. coli</i>	80	90	70	50	90	30
<i>A. suum</i>	90	90	80	40	100	20
<i>T. suis</i>	70	60	70	10	60	20

F=farm, C=control, SH=*S. hortensis*, CO=*C. officinalis*.

**Table S4.** The prevalence (P), at 0, 14 and 28 days in sows.

<b>F1</b>						
	<b>C (0)</b>	<b>CO (0)</b>	<b>C (14)</b>	<b>CO (14)</b>	<b>C (28)</b>	<b>CO (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>B. coli</i>	90	100	90	40	100	50
	<b>C (0)</b>	<b>SH (0)</b>	<b>C (14)</b>	<b>SH (14)</b>	<b>C (28)</b>	<b>SH (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	30	40	30	10	40	10
<i>B. coli</i>	90	100	70	20	80	20
<i>A. suum</i>	30	40	40	10	40	10
<i>Oesophagostomum</i> spp.	30	40	20	10	10	-
<b>F2</b>						
	<b>C (0)</b>	<b>CO (0)</b>	<b>C (14)</b>	<b>CO (14)</b>	<b>C (28)</b>	<b>CO (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	50	60	60	50	60	40
<i>B. coli</i>	60	70	90	30	80	30
<i>A. suum</i>	20	30	30	30	40	10
<i>Oesophagostomum</i> spp.	70	70	70	70	70	30
<i>Cryptosporidium</i> spp.	10	10	-	-	10	-
	<b>C (0)</b>	<b>SH (0)</b>	<b>C (14)</b>	<b>SH (14)</b>	<b>C (28)</b>	<b>SH (28)</b>
<b>Parasite</b>	P %	P %	P %	P %	P %	P %
<i>Eimeria</i> spp.	50	60	40	10	60	20
<i>B. coli</i>	80	80	70	20	90	30
<i>A. suum</i>	30	30	40	10	40	10
<i>Oesophagostomum</i> spp.	20	30	30	20	30	10
<i>Cryptosporidium</i> spp.	10	10	10	-	10	10

F=farm, C=control, SH=*S. hortensis*, CO=*C. officinalis*.