Table S1 The stress related indicators and digestive enzymes of *Coreius guichenoti* before microplastics stimulation

Tissue	total protein (g L^{-1})	ACP (U min^{-1} g^{-1} prot)	AKP (U min^{-1} g^{-1} prot)	POD (U min^{-1} g^{-1} prot)	SOD (U g^{-1} prot)	GPx (U min^{-1} g^{-1} prot)	GR (U min^{-1} g^{-1} prot)	MDA (mmol g^{-1} prot)	LZM (μg ml^{-1})	Protease (U min^{-1} g^{-1} prot)	α-amylase (U min^{-1} g^{-1} prot)	Lipase (U min^{-1} g^{-1} prot)
Skin	0.63 ± 0.05	0.14 ± 0.00	0.17 ± 0.00	82.37 ± 1.01	40.81 ± 1.42	918.75 ± 44.27	78.55 ± 3.39	17.02 ± 0.86	47.94 ± 1.14	na	na	na
Gill	1.77 ± 0.05	0.14 ± 0.00	0.14 ± 0.00	59.90 ± 2.55	45.61 ± 1.06	819.63 ± 26.66	69.75 ± 2.66	17.93 ± 0.48	36.91 ± 1.45	na	na	na
Muscle	0.81 ± 0.00	0.16 ± 0.01	0.19 ± 0.00	99.07 ± 2.55	55.51 ± 3.72	1126.73 ± 49.12	151.44 ± 5.83	19.68 ± 2.62	99.71 ± 2.56	na	na	na
Liver	1.86 ± 0.02	0.18 ± 0.01	0.20 ± 0.00	116.72 ± 10.97	108.30 ± 4.00	1243.09 ± 26.72	245.98 ± 12.75	15.28 ± 1.34	97.64 ± 2.97	80.04 ± 1.51	8.50 ± 0.43	262.37 ± 6.69
Intestine	1.93 ± 0.08	0.16 ± 0.00	0.17 ± 0.00	124.75 ± 5.79	57.59 ± 3.96	990.31 ± 19.46	209.34 ± 7.03	12.87 ± 2.07	76.61 ± 0.43	86.20 ± 2.87	6.80 ± 0.31	133.32 ± 11.16

Note: “na” represents there was no relevant data. $n = 3$.

Formula for calculating enzyme activity

Total protein contents (TP, g L^{-1}) = (OD*a* - OD*b*) / (OD*c* - OD*b*) * A * B

Note: OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank group. OD*c* represents the absorbance value of the standard product. A represents the standard product concentration (0.563 g/L). B represents the sample dilution ratio.

ACP (U min^{-1} g^{-1} prot) = 0.1 * (OD*a* – OD*b* + 0.0018) / W * D

Note: OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank control. W represents the sample weight. D represents the sample dilution ratio.

AKP (U min^{-1} g^{-1} prot) = 0.128 * (OD*a* – OD*b* - 0.0019) / W * D

Note: OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank control. W represents the sample weight. D represents the sample dilution ratio.

POD (U min^{-1} g^{-1} prot) = 100 * (OD*a* – OD*b*) / W * D

Note: OD*a* represents the absorbance value of the sample at "n + 1" mins. OD*b* represents the absorbance value of the sample at "n" mins. W represents the sample weight. D represents the sample dilution ratio.

SOD (U g^{-1} prot) = 10 * A / (1- A) / W *D; A (%) = [(OD*c* - OD*d*) - (OD*a* - OD*b*)]/ (OD*c* - OD*d*) * 100%

Note: A represents the inhibition rate of SOD. W represents the sample weight. D represents the sample dilution ratio. OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank in the experimental group. OD*c* represents the absorbance value of the control group. OD*d* represents the absorbance value of the blank in control group.

GPx (U min^{-1} g^{-1} prot) = 683.7 * (OD*a* – OD*b* + 0.0103) / W * D

Note: OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank control. W represents the sample weight. D represents the sample dilution ratio.

GR (U min^{-1} g^{-1} prot) = 73.5 * (OD*a* – OD*b*) / W * D

Note: OD*a* represents the absorbance value of the sample at "n + 10" mins. OD*b* represents the absorbance value of the sample at "n" mins. W represents the sample weight. D represents the sample dilution ratio.

MDA (mmol g^{-1} prot) = 32.3 * (OD*a* – OD*b*) / W * D

Note: OD*a* represents the absorbance value of the sample in 532 nm. OD*b* represents the absorbance value of the sample in 600 nm. W represents the sample weight. D represents the sample dilution ratio.

LZM ($\mu g\ ml^{-1}$) = 10 * (OD*a* – OD*b*) / (OD*c* – OD*d*) * D

Note: OD*a* represents the absorbance value of the sample at "n + 2.5" mins. OD*b* represents the absorbance value of the sample at "n" mins. OD*c* represents the absorbance value of the standard sample at "n + 2.5" mins. OD*d* represents the absorbance value of the standard sample at "n" mins. D represents the sample dilution ratio.

Protease ($U\ min^{-1}\ g^{-1}$ prot) = 35 * (OD*a* – OD*b*) / (OD*c* – OD*d*) / W * D

Note: OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank in the experimental group. OD*c* represents the absorbance value of the control group. OD*d* represents the absorbance value of the blank in control group. W represents the sample weight. D represents the sample dilution ratio.

α-amylase ($U\ min^{-1}\ g^{-1}$ prot) = 6.88 * (OD*a* – OD*b* + 0.0039) / W * D

Note: OD*a* represents the absorbance value of the sample. OD*b* represents the absorbance value of the blank control. W represents the sample weight. D represents the sample dilution ratio.

Lipase ($U\ min^{-1}\ g^{-1}$ prot) = 307.7 * (OD*a* – OD*b* + 0.0003) / W * D

Note: OD*a* represents the absorbance value of the sample at "n + 10" mins. OD*b* represents the absorbance value of the sample at "n" mins. W represents the sample weight. D represents the sample dilution ratio.