Supporting Information

Haematophagic *Caenorhabditis elegans*

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This supporting information PDF Contains-

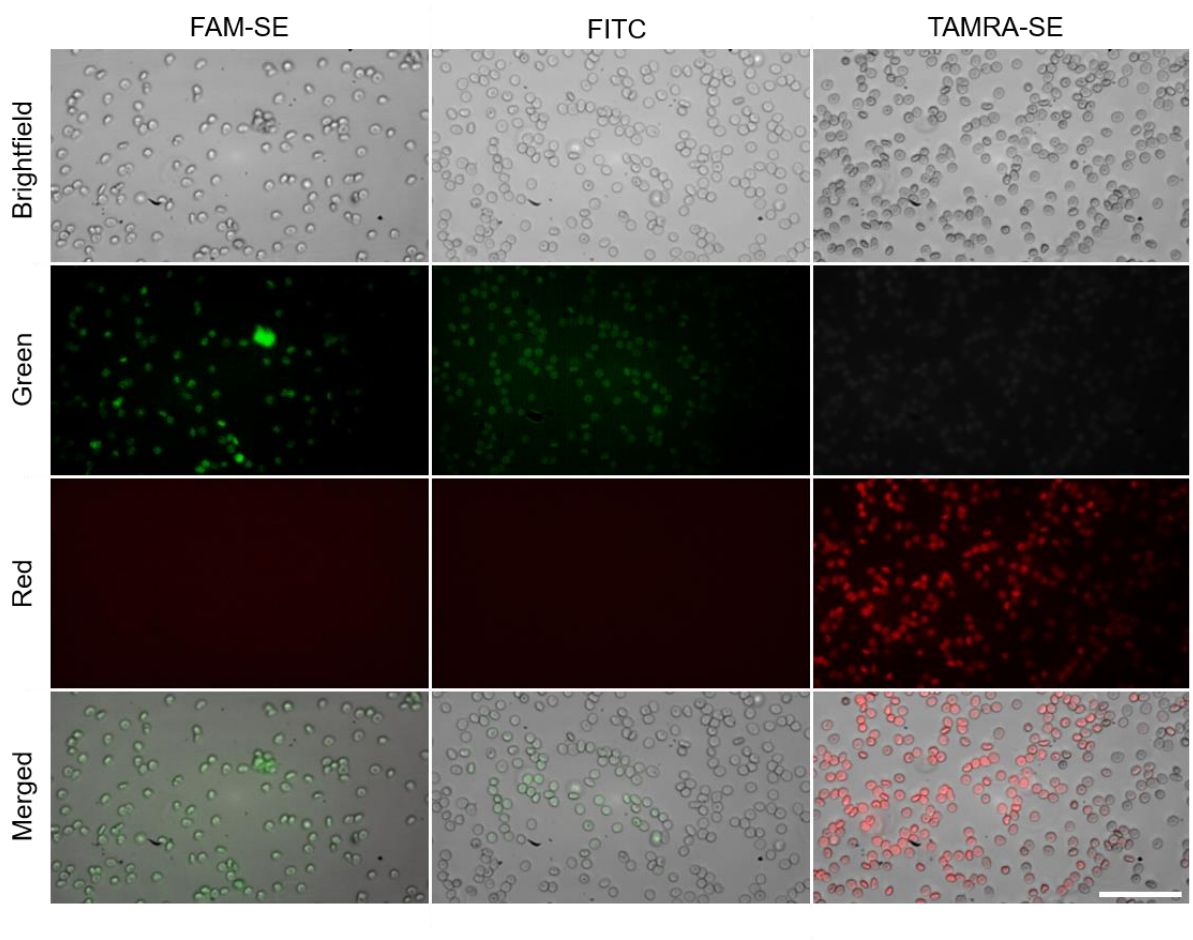

Figure S1. Brightfield and fluorescence images for erythrocytes labelled with FAM-SE, FITC and TAMRA-SE. Scale bar = 100 µm.

A

SCORE	EXPECT	METHOD	IDENTITIES	POSITIVES	GAPS
217 bits(552)	8e-77	Compositional matrix adjust.	111/207(54%)	143/207(69%)	3/207(1%)

B

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C. ele 1    MVSYKLTYFDGRGAGELCRQIFAAAEQKYEDNRLTDEEWEKFKAAGKTPYNQLPMLEVDG  60
            MV YKLTYF  RGAGE  RQIFA A+Q++ED RL  E++ K K     P+ Q+P+LEVDG
N. ame 1    MVHYKLTYFAIRGAGECARQIFALADQEFEDVRLDKEQFAKVKP--DLPFGQVPVLEVDG  58

C. ele 61   KPLAQSHAMARYLAREFGFNGKSRWEEAQVNSLADQYKDYYAEARPYLAVKLGYTEGDAE  120
            K LAQS A+ RYLAR+FGF GKS ++EA V+SLADQY DY  E + +    +G  EGD E
N. ame 59   KQLAQSLAICRYLARQFGFAGKSTFDEAVVDSLADQYSDYRVEIKSFFYTVIGMREGDVE  118

C. ele 121  ALYTSVYLPVFKKHYGFFVNALKASGSGFLVGNSLTFIDLLVAQHSADLLGREKSDLFND  180
             L   V LP   K +GF    LK S SGFLVG+SLT++DLLV++H+A +L     +
N. ame 119  QLKKEVLLPARDKFFGFITKFLKKSPSGFLVGDSLTWVDLLVSEHNATMLTF-VPEFLEG  177

C. ele 181  VPEMKAHSEKVQSIPQIKKWIETRPAS  207
             PE+K H EK+++IP++KKWIETRP +
N. ame 178  YPEVKEHMEKIRAIPKLKKWIETRPET  204
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Figure S2. (A) Search criteria and (B) amino acid overlay for *C. elegans* (*C. ele*, GST O45451, Query) and *N. americanus* (*N. ame*, GST1 D3U1A5, Subject).

Supporting Movie 1: Real-time video of *C. elegans* feeding on TAMRA-SE labelled erythrocytes, imaged continually in fluorescent red channel. Movie shows, the ingestion of erythrocytes by *C. elegans* occurs *via* a 5-step process: 1) *C. elegans* survey their immediate vicinity for sustenance. 2) Upon finding an erythrocyte it is captured by the mouth. 3) Pharyngeal pumping draws the erythrocyte into the pharynx causing it to rupture (red flashes) and release its contents. 3) The contents of the erythrocyte are taken up into the pharynx via peristaltic action, passing the pharyngeal grinder and pharyngeal-intestinal junction into the intestine. 4) Erythrocyte contents are also dispersed into the immediate vicinity surrounding the mouth, suggesting erythrocyte ingestion is an inefficient process. 5) *C. elegans* seek further sustenance and nutrition.