

Curt Lively
L567

file: local mate competition.xls

CACULATIONS PAGE

Local Mate Competition

k	4	ai	Wi		
apop	0.25	0	1.0000		
res	1	0.05	1.1375	0.25	1.5000
		0.1	1.2529		
ESS	0.42857	0.15	1.3500		
W(ESS)	1.14286	0.2	1.4316		
		0.25	1.5000		
		0.3	1.5571		
		0.35	1.6045		
		0.4	1.6435		
		0.45	1.6750		
		0.5	1.7000		
		0.55	1.7192		
		0.6	1.7333		
		0.65	1.7429		
		0.7	1.7483		
		0.75	1.7500		
		0.8	1.7484		
		0.85	1.7438		
		0.9	1.7364		
		0.95	1.7265		
		1	1.7143		

Variables (you can change these)

number of mates = 4

resident male allocation 0.25

resources 1

Calculated values (don't change)

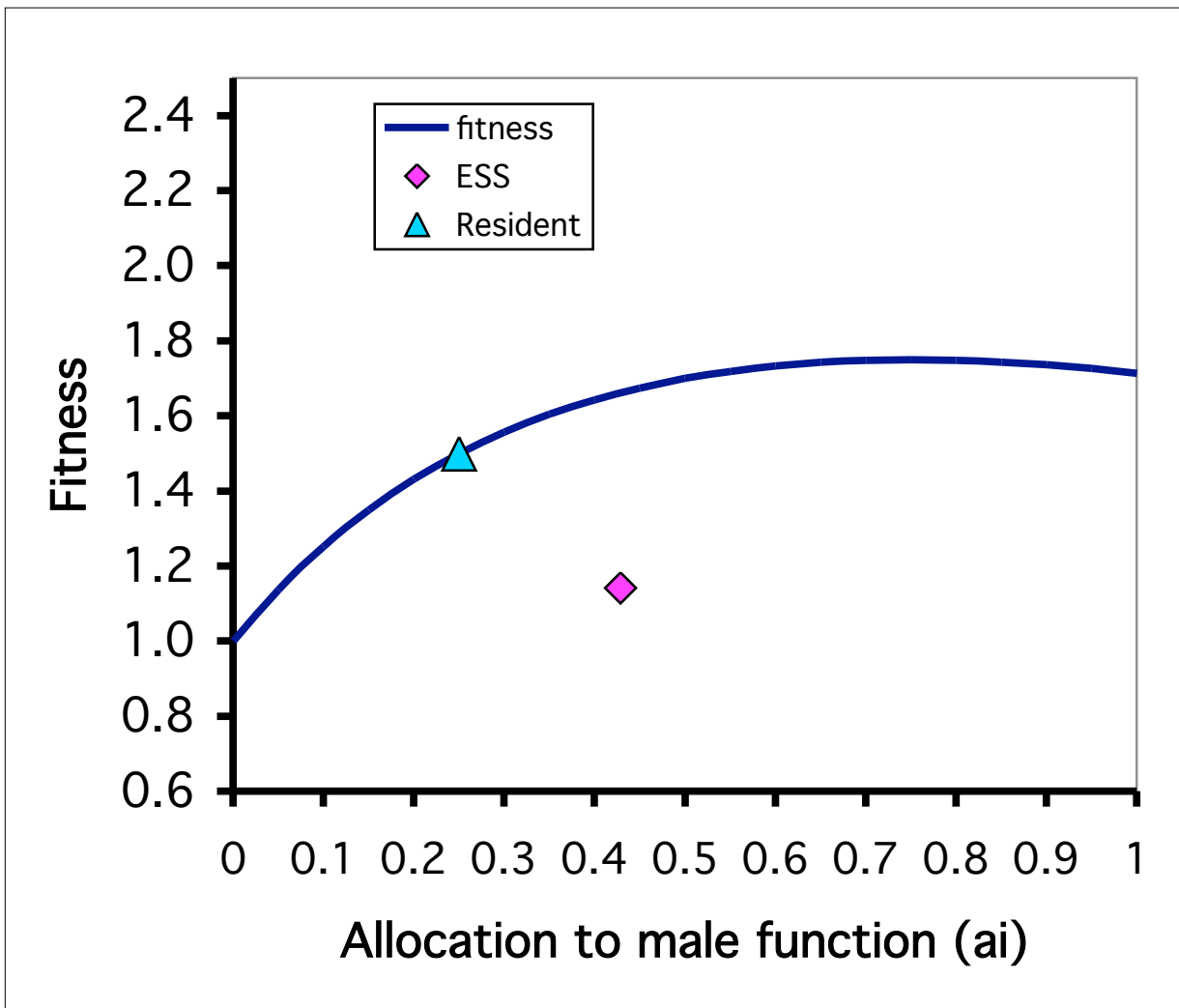
ESS 0.429

Pop mean fitness at the ESS 1.143

a(res) 0.25 fit(res) 1.5

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype



Variables (you can change these)

number of mates = 4

resident male allocation 0.35

resources 1

Calculated values (don't change)

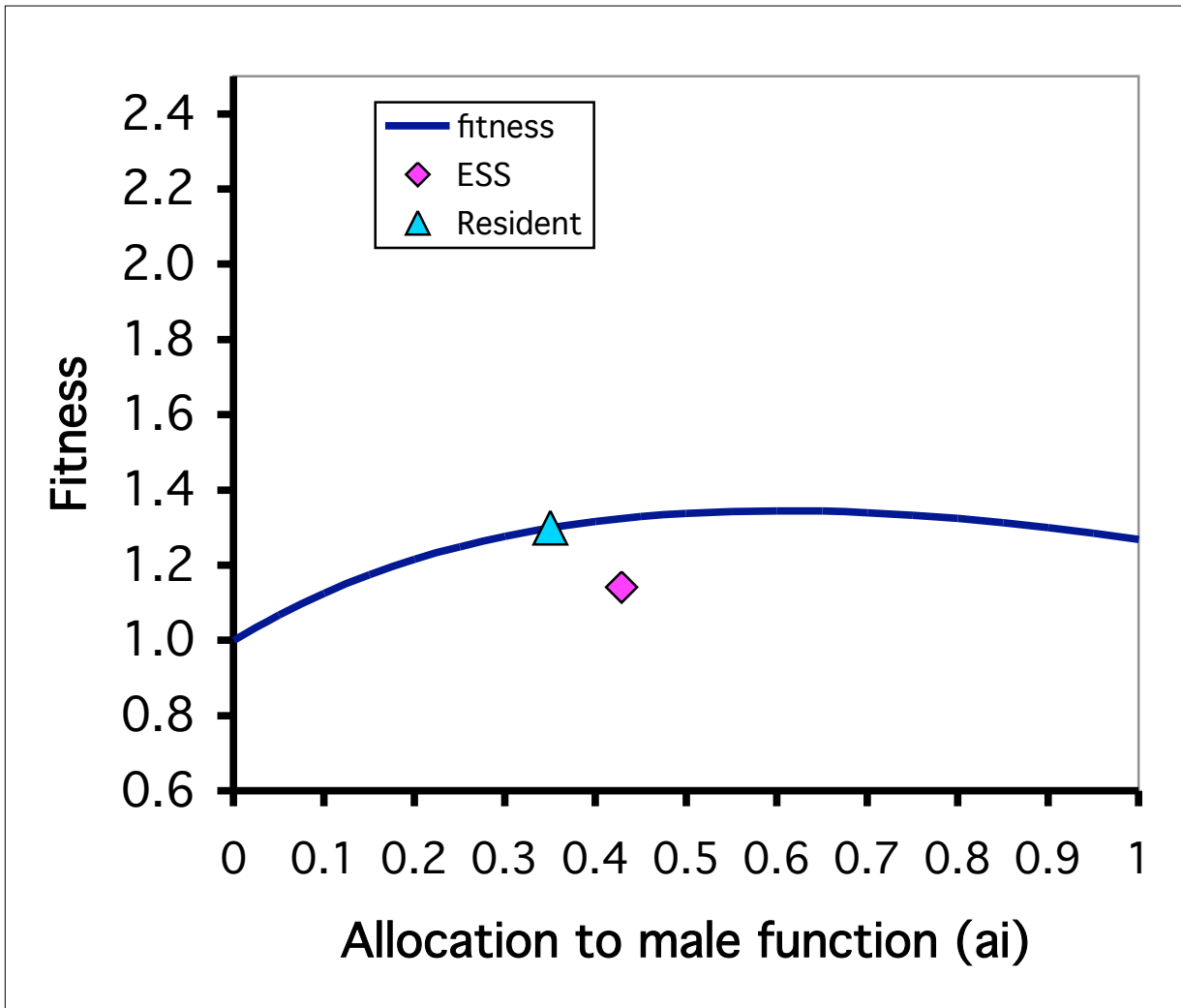
ESS 0.429

Pop mean fitness at the ESS 1.143

a(res) 0.35 fit(res) 1.3

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype



Variables (you can change these)

number of mates = 4

resident male allocation 0.42

resources 1

Calculated values (don't change)

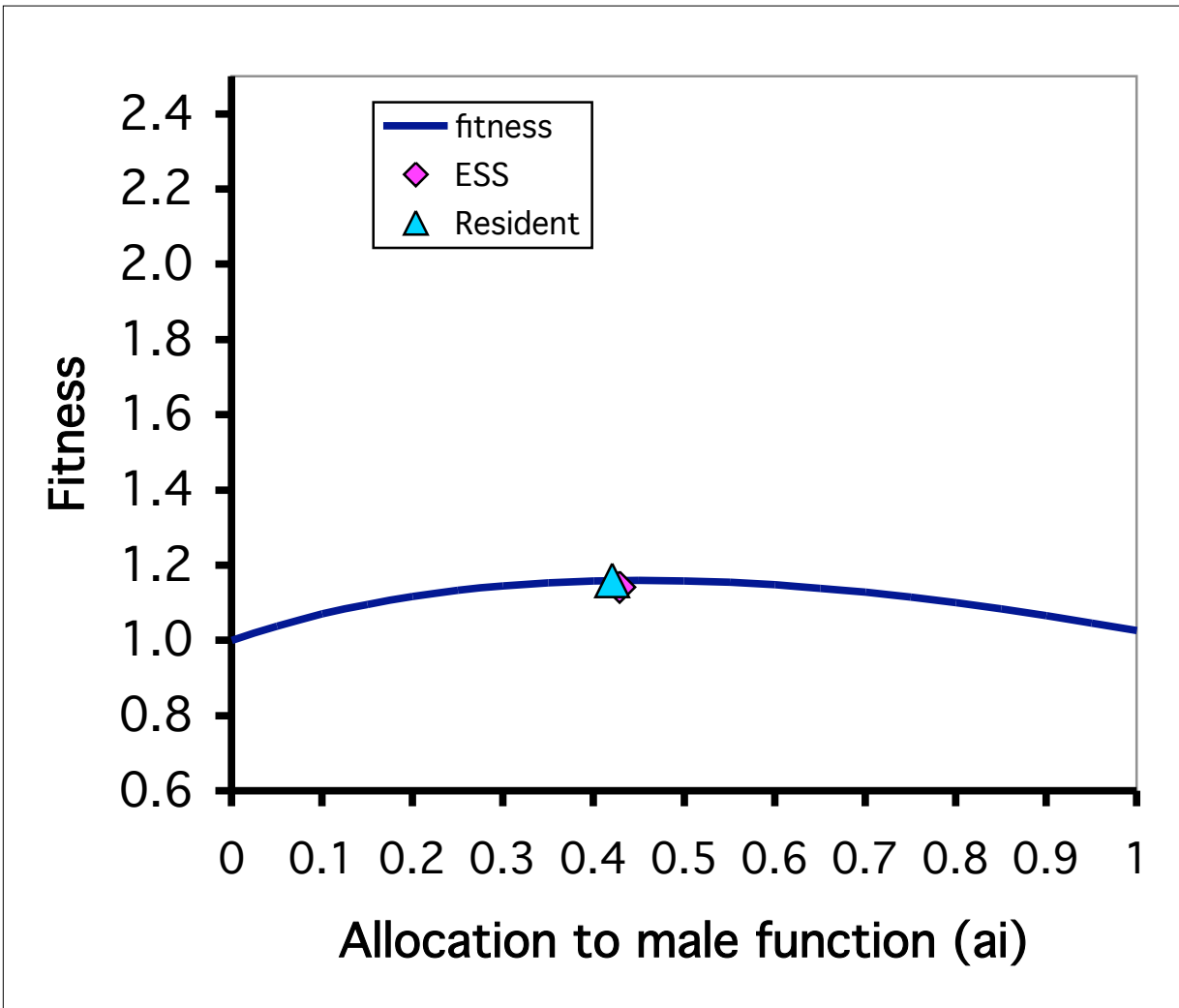
ESS 0.429

Pop mean fitness at the ESS 1.143

a(res) 0.42 fit(res) 1.16

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype



Variables (you can change these)

number of mates = 100

resident male allocation = 0.25

resources = 1

Calculated values (don't change)

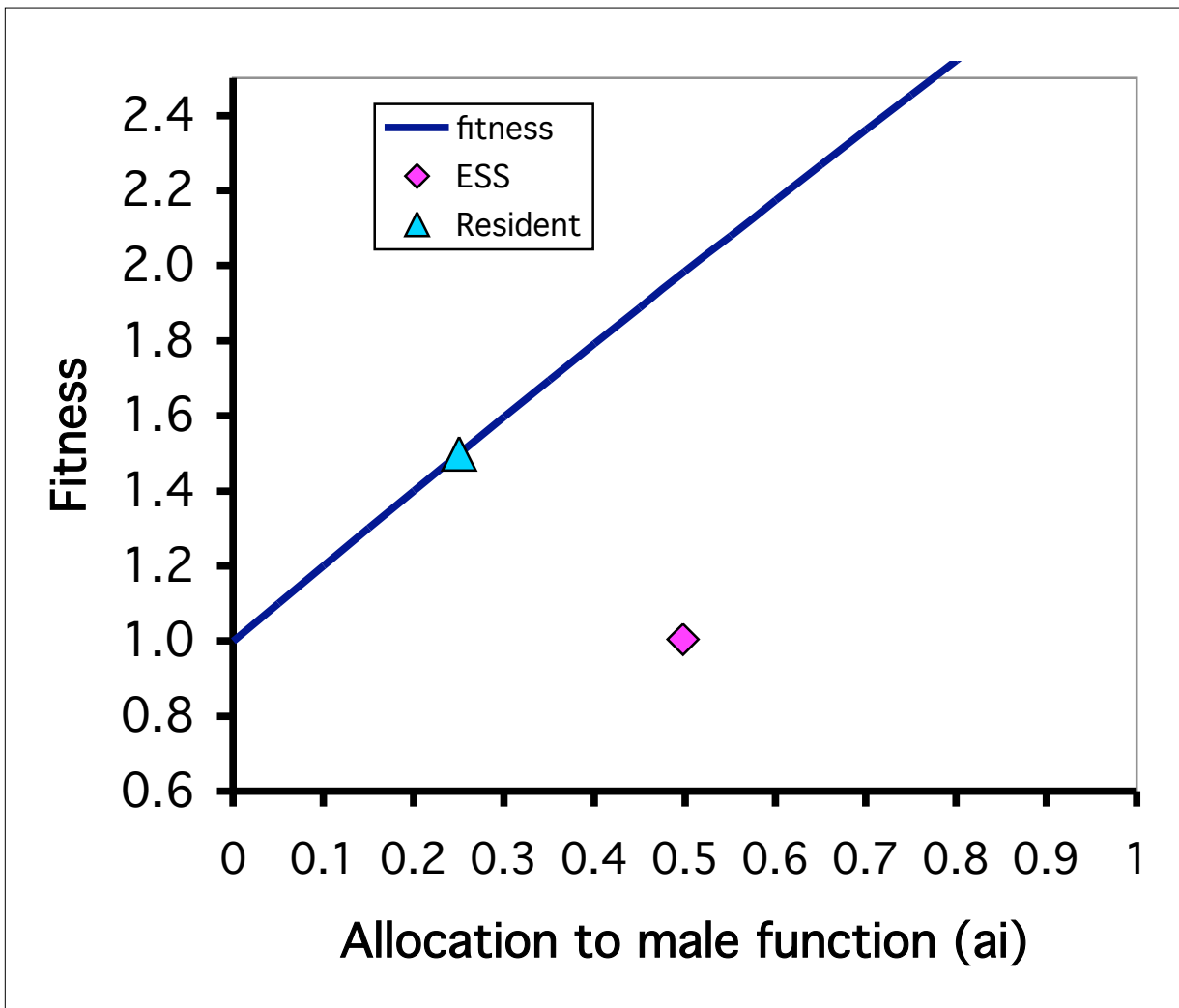
ESS = 0.497

Pop mean fitness at the ESS = 1.005

a(res) = 0.25 fit(res) = 1.5

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype



Variables (you can change these)

number of mates = 100

resident male allocation = 0.35

resources = 1

Calculated values (don't change)

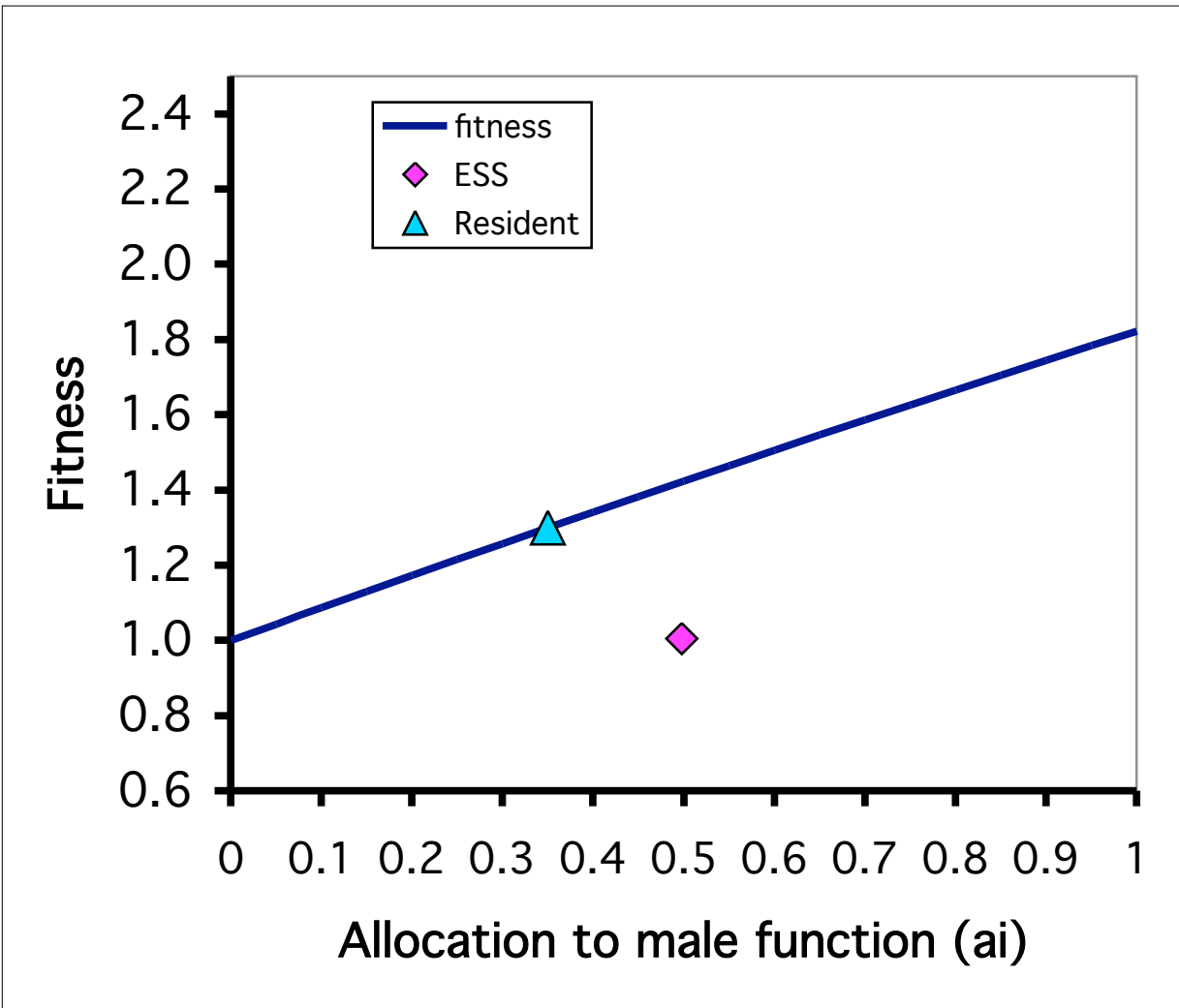
ESS = 0.497

Pop mean fitness at the ESS = 1.005

a(res) = 0.35 fit(res) = 1.3

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype



Variables (you can change these)

number of mates = 100

resident male allocation = 0.45

resources = 1

Calculated values (don't change)

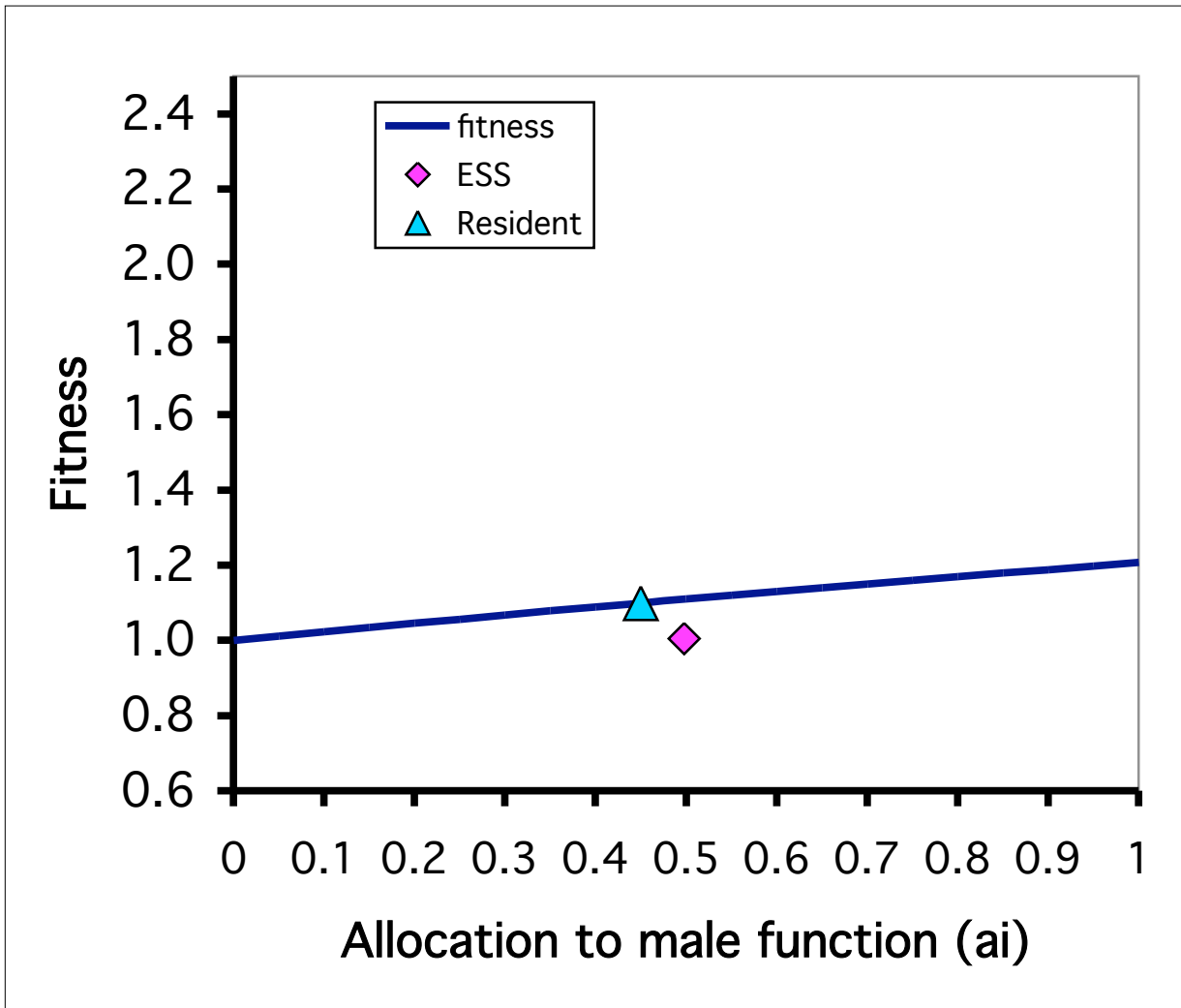
ESS = 0.497

Pop mean fitness at the ESS = 1.005

a(res) = 0.45 fit(res) = 1.1

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype



Variables (you can change these)

number of mates = 100

resident male allocation 0.5

resources 1

Calculated values (don't change)

ESS 0.497

Pop mean fitness at the ESS 1.005

a(res) 0.5 fit(res) 1

Notes

1. The red diamond shows the ESS and popl. mean fitness
2. The blue line shows fitness
3. Change blue variables
4. Note that when the population mean male allocation is equal to the ESS, the red diamond is at the top of the curve.
5. The triangle is fitness of the resident genotype

