

Table 1 Developmental period analysis of amino acids to *Culex quinquefasciatus* larva

Amino acids used	Concentrations (%)	Development period (days) [Mean \pm Standard Error]					Total developmental period (days)
		1 st to 2 nd instar	2 nd to 3 rd instar	3 rd to 4 th instar	4 th instar to pupa	Pupa to adult	
Alanine	2	3.6 \pm 0.509	5.4 \pm 0.678	4.4 \pm 0.244	4.8 \pm 0.374	2.2 \pm 0.2	20.4
	3	2.6 \pm 0.244	4.2 \pm 0.374	4.6 \pm 0.244	4.6 \pm 0.509	2.6 \pm 0.244	18.6
	4	4.2 \pm 0.663	6.8 \pm 0.860	5.8 \pm 0.374	5.4 \pm 0.244	2.8 \pm 0.2	25
Isoleucine	2	2.6 \pm 0.244	8 \pm 0.316	6.6 \pm 0.244	5.6 \pm 0.4	2.4 \pm 0.244	25.2
	3	2.4 \pm 0.244	7.6 \pm 0.509	5.6 \pm 0.509	6.2 \pm 0.374	3 \pm 0.316	24.8
	4	3.4 \pm 0.244	8 \pm 0.447	6.2 \pm 0.374	7.2 \pm 0.374	3.2 \pm 0.374	28
Leucine	2	1.2 \pm 0.2	5 \pm 0.31	5.6 \pm 0.244	4 \pm 0.316	2.6 \pm 0.244	18.4
	3	1.2 \pm 0.2	5.4 \pm 0.509	4.8 \pm 0.583	3.8 \pm 0.374	3.2 \pm 0.2	18.4
	4	1.6 \pm 0.244	6.2 \pm 0.374	5.6 \pm 0.509	4.6 \pm 0.509	3.4 \pm 0.244	21.4
Glutamic acid	2	3.2 \pm 0.374	6.6 \pm 0.678	6.4 \pm 0.244	6.2 \pm 0.374	3.2 \pm 0.2	25.4
	3	2.4 \pm 0.244	5.8 \pm 0.916	5.8 \pm 0.583	6 \pm 0.447	3.4 \pm 0.244	23.4
	4	3.4 \pm 0.244	5.6 \pm 0.4	5.4 \pm 0.244	6.2 \pm 0.374	3 \pm 0.316	23.6
Tyrosine	2	1.2 \pm 0.2	4.6 \pm 0.4	4.4 \pm 0.678	5.4 \pm 0.509	3 \pm 0.316	18.6
	3	1.4 \pm 0.244	4.4 \pm 0.6	5.4 \pm 0.6	3.6 \pm 0.4	3 \pm 0.316	17.8
	4	1.8 \pm 0.2	5.6 \pm 0.6	4.6 \pm 0.871	4.4 \pm 0.927	3.4 \pm 0.244	19.8
Methionine	2	2.2 \pm 0.2	4.2 \pm 0.663	6 \pm 0.447	6 \pm 0.447	2.6 \pm 0.244	21
	3	2.2 \pm 0.374	4.2 \pm 0.583	5.6 \pm 0.4	6 \pm 0.547	2.6 \pm 0.244	20.6
	4	2.6 \pm 0.244	5.2 \pm 0.734	6 \pm 0.447	4.4 \pm 0.6	2.6 \pm 0.244	20.8
Glycine	2	1.2 \pm 0.2	4.4 \pm 0.748	4.8 \pm 0.489	5.2 \pm 0.583	3 \pm 0.316	18.6
	3	1.2 \pm 0.2	4.2 \pm 0.583	4.8 \pm 0.583	5 \pm 0.632	3.2 \pm 0.2	18.4
	4	1.4 \pm 0.244	5.4 \pm 0.244	5.8 \pm 0.374	6.4 \pm 0.244	2.8 \pm 0.374	21.8
Phenyl alanine	2	1.2 \pm 0.2	5 \pm 0.447	6 \pm 0.547	4.2 \pm 0.374	3 \pm 0.316	19.4
	3	2 \pm 0.447	4.6 \pm 0.509	6.2 \pm 0.860	4.2 \pm 0.374	2.6 \pm 0.244	19.6
	4	2.2 \pm 0.2	6.2 \pm 0.374	7 \pm 0.707	5.4 \pm 0.509	2.4 \pm 0.244	23.2
Control		3.33 \pm 0.3	8.33 \pm 0.66	5.33 \pm 0.3	6 \pm 0	3 \pm 0	21.9