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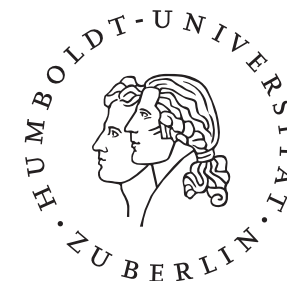
Wael Yakti

Dietary Protein Source and Level Influence the Free Amino Acid Composition of *Black Soldier Fly Larvae* (BSFL)

Dietary Protein Source and Level Influence the Free Amino Acid Composition of Black Soldier Fly Larvae (BSFL)

Is the Amino Acid composition of the BSF influenced by what it eats???

Short Answer : Not much :D



Open Access Article

Rethinking Amino Acid Nutrition of Black Soldier Fly Larvae (*Hermetia illucens*) Based on Insights from an Amino Acid Reduction Trial

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by Andreas Lemme^{1,*} and Patrick Klüber²

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RESEARCH ARTICLE

Enhancing the nutritional value of black soldier fly larvae through the nutrient amino acid transporter suppression in the excretion system

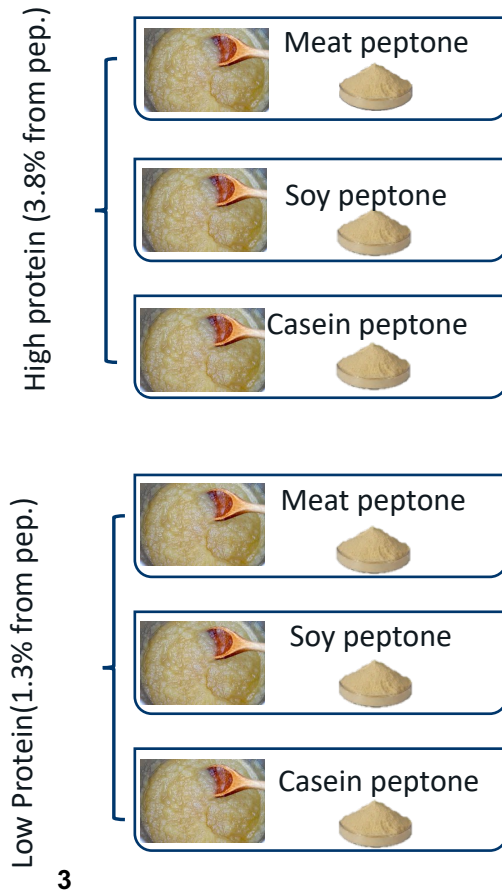
C.-M. Liu^{1*}, T. Uehara¹ and M. Shimoda²

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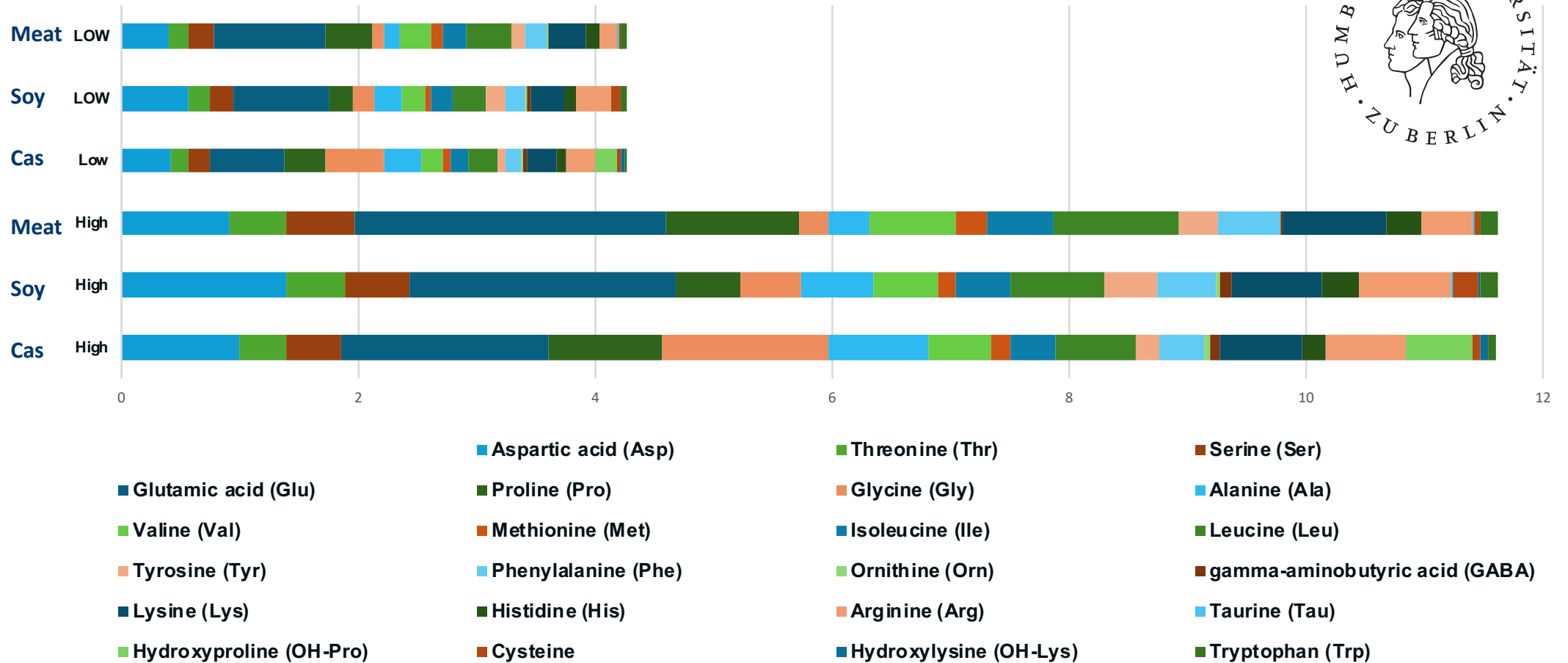
Dietary Protein Source and Level Influence the Free Amino Acid Composition of Black Soldier Fly Larvae (BSFL)

How about the ballance between free and protein bound amino acids ? How about different levels of protein?



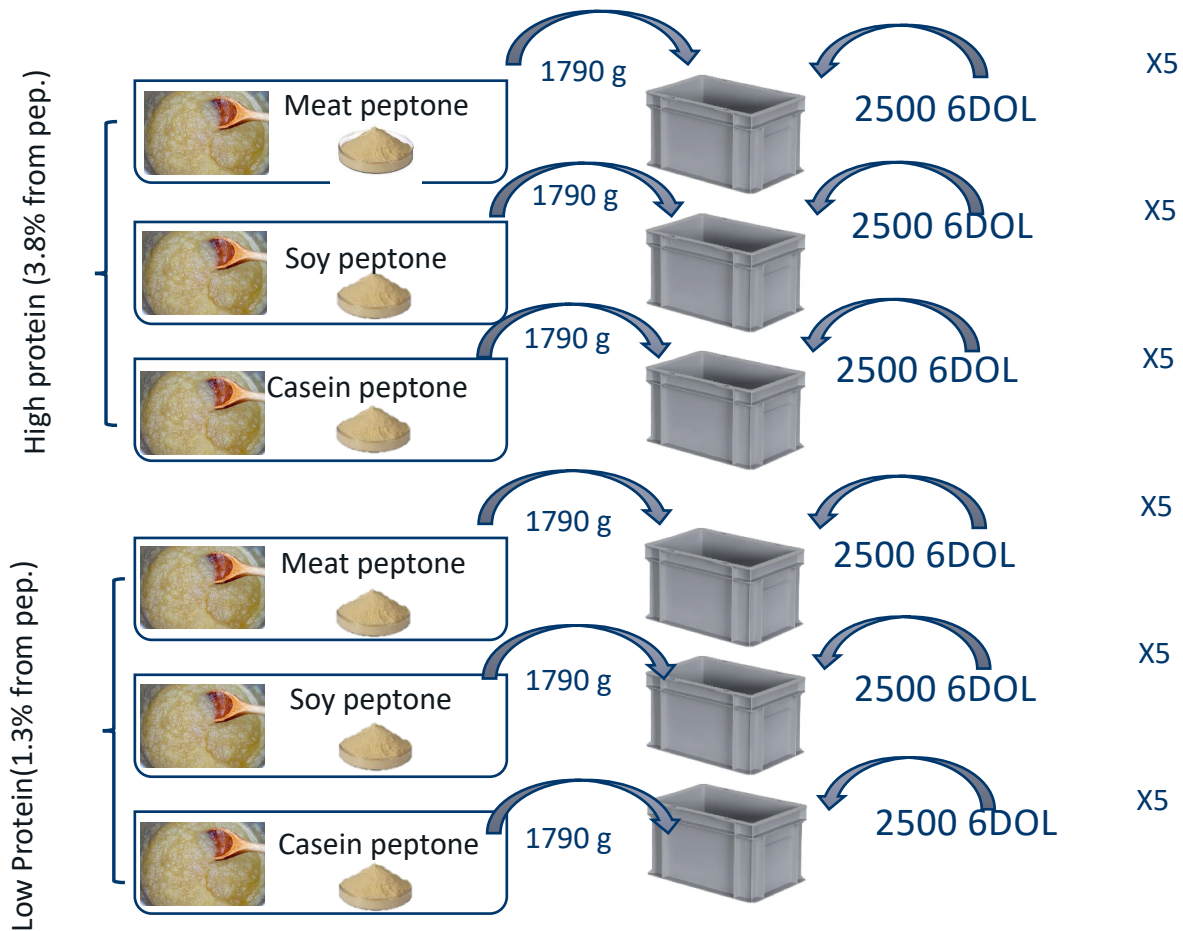
No.	Treatment	peptone(%)	lignin(%)	apple pomace(%)	starch(%)	straw(%)	total amino acids% from peptone (wet basis)
1	PFA	4.53	5.47	81.20	2.21	6.63	3.87%
2	PFB	1.58	8.42	81.20	2.21	6.63	1.33%
3	PYA	6.08	3.92	81.20	2.21	6.63	3.87%
4	PYB	2.11	7.89	81.20	2.21	6.63	1.33%
5	PCA	3.90	6.10	81.20	2.21	6.63	3.87%
6	PCB	1.36	8.64	81.20	2.21	6.63	1.33%
PF: peptone from meat; PY: peptone from soybean; PC: peptone from casein;							

Amino acid profile of substrates (Dry Basis)

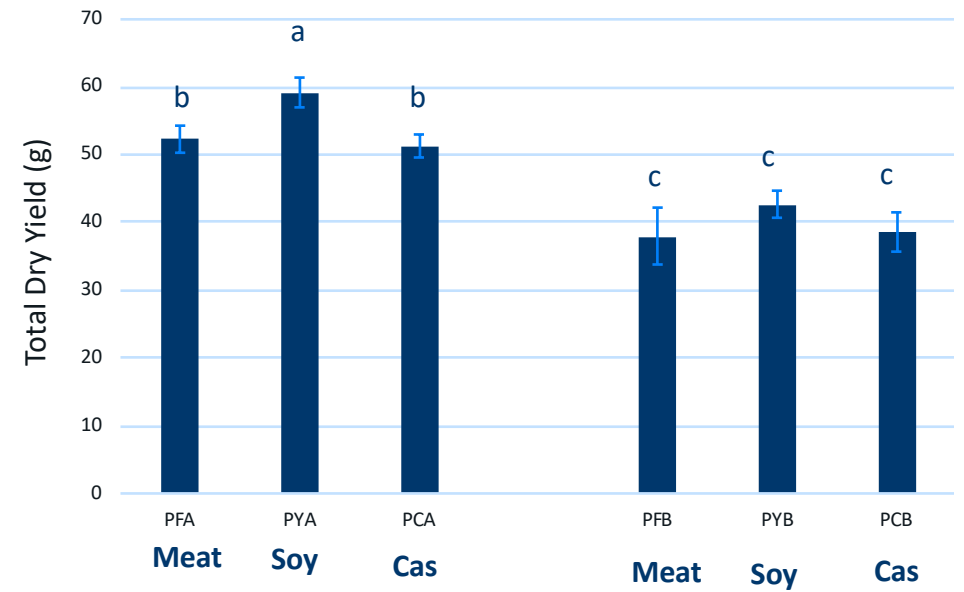
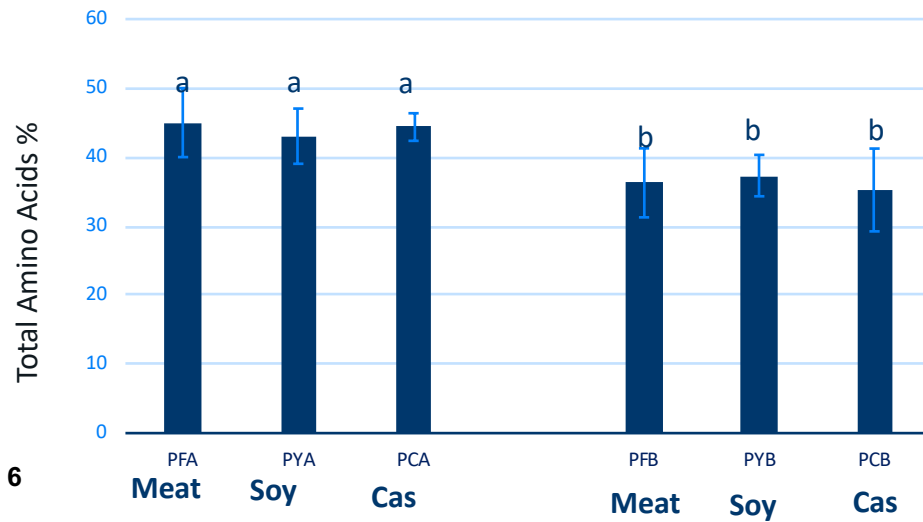
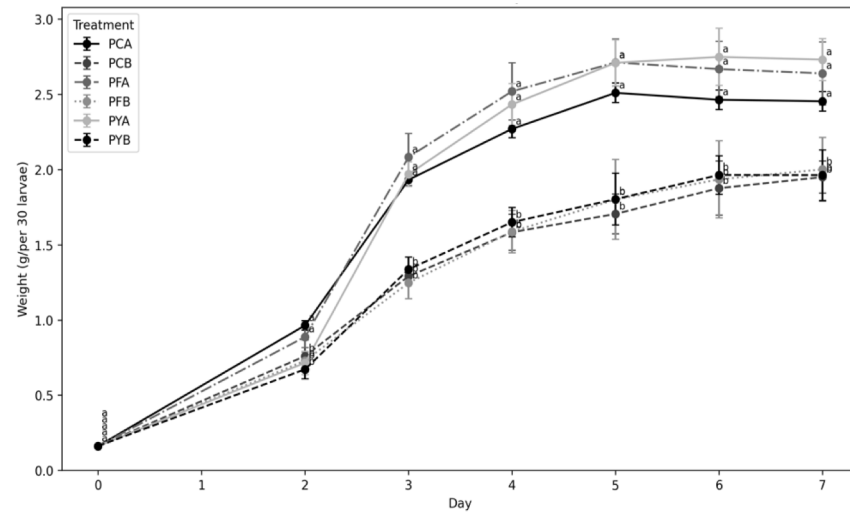


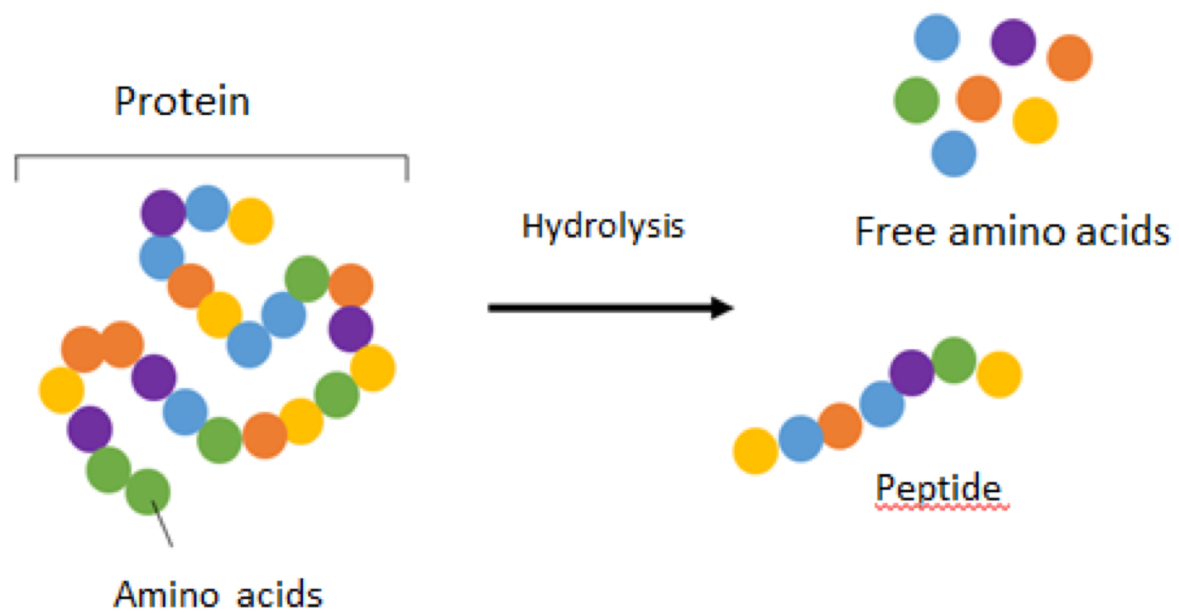
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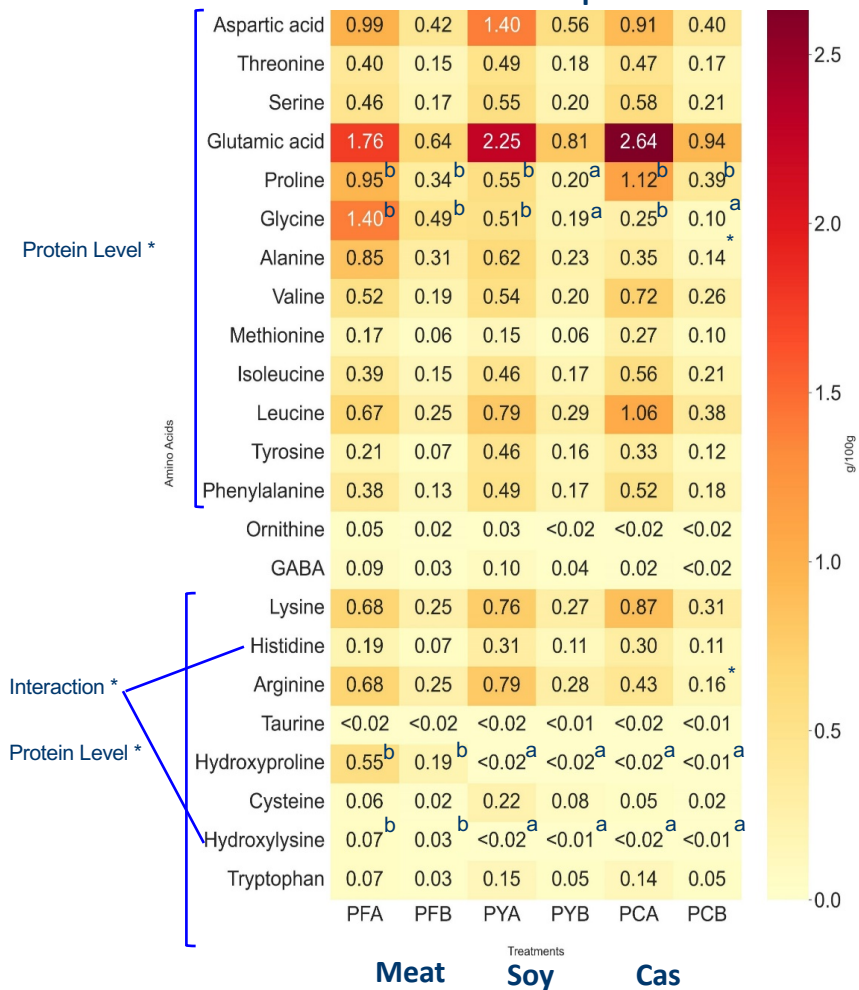


The growth of BSFL

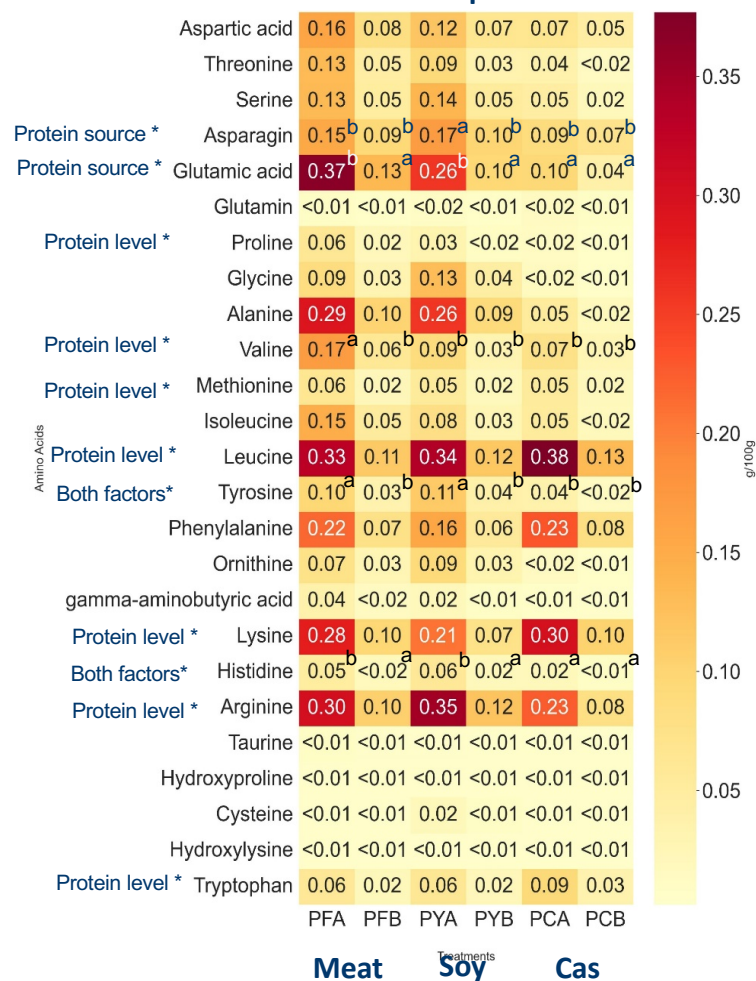


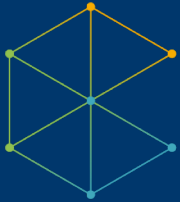


Total Amino Acids in the produced Larva



Free Amino Acids in the produced Larva





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Thank you for your attention

Credit for conducting the work



Szu-Yun Chen - Ph.D. student