

Supplementary Data File

Unraveling the phenotypic and metabolic responses induced by urea-encapsulated hydrogel beads on *Brassica juncea* (L.) Czern & Coss.

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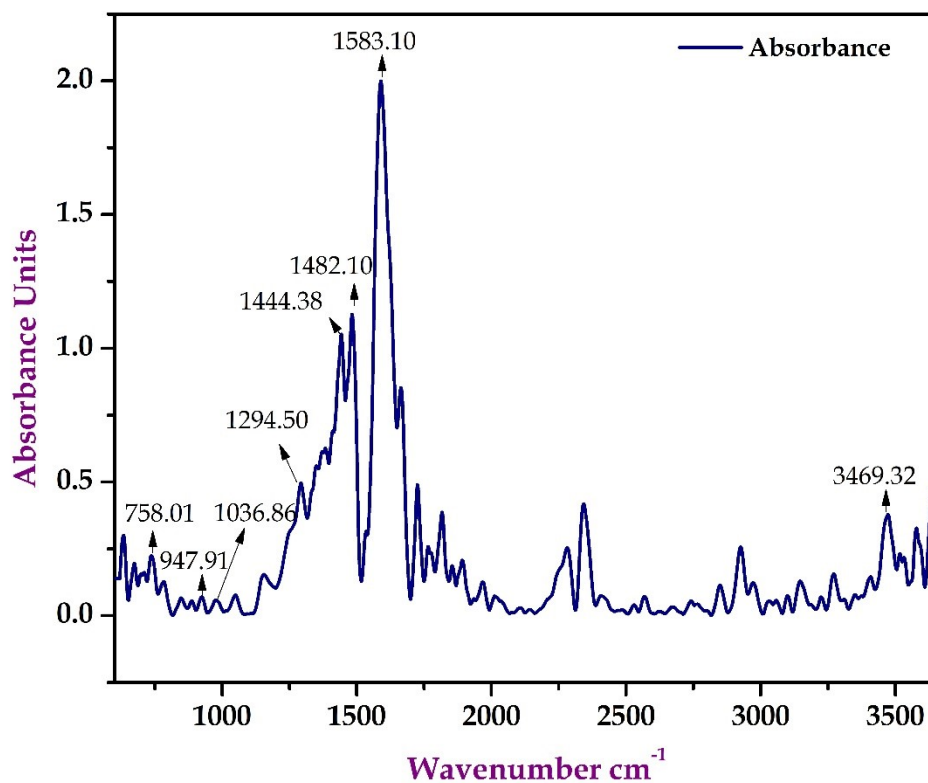
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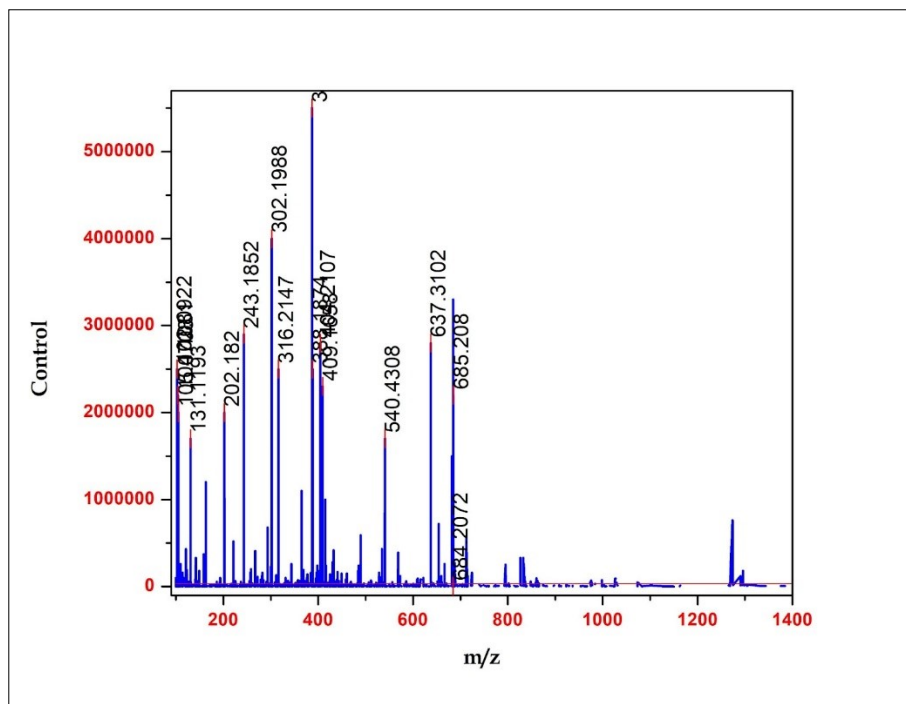
S. Table1: List of metabolites identified through LC-MS analysis

Sl. no	Identified Compounds	Control	Urea	HBWU	HBWOU
1	L-Glutamine	6800	4500	5900	3000
2	L-Glutamate	0	20000	24000	0
3	N-Carbamyl-L-glutamate	3900	5800	5600	2600
4	2-Oxoglutarate	4500	4700	4300	4400
5	NAD+	0	10000	2100	0
6	NADP+	0	0	10000	0
7	NADPH	3000	0	9200	6000
8	ATP	37000	23000	14000	34000
9	ADP	8100	2800	3400	4500
10	NADH	4900	2200	2800	2700
11	Carboxyphosphate	13000	12000	14000	16000
12	Carbamoyl phosphate	3300	2700	3000	4200
13	D-Glucosamine 6-phosphate	4200	4300	3800	4500
14	5-Phosphoribosylamine	0	4400	9000	0
15	2-Oxoglutaramate	5900	6800	5300	3000
16	5'-Phosphoribosylglycinamide	0	4700	12000	0
17	Deoxyinosine	0	4700	4100	0

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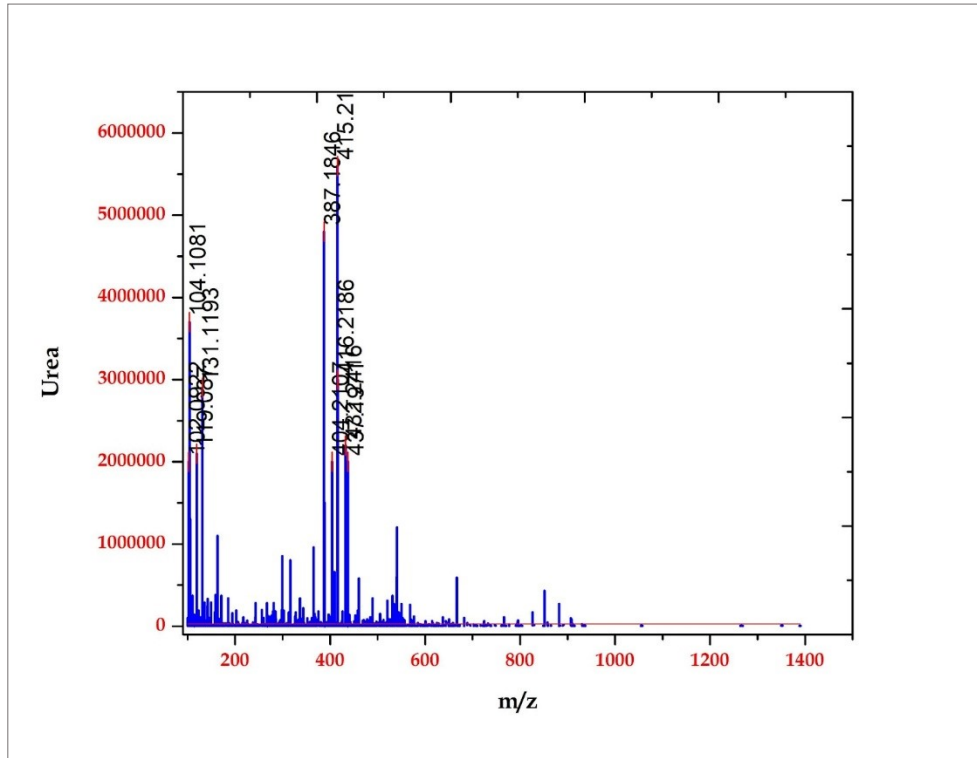


SF 1: FT - IR spectra of urea encapsulated GXG-SA hydrogel beads

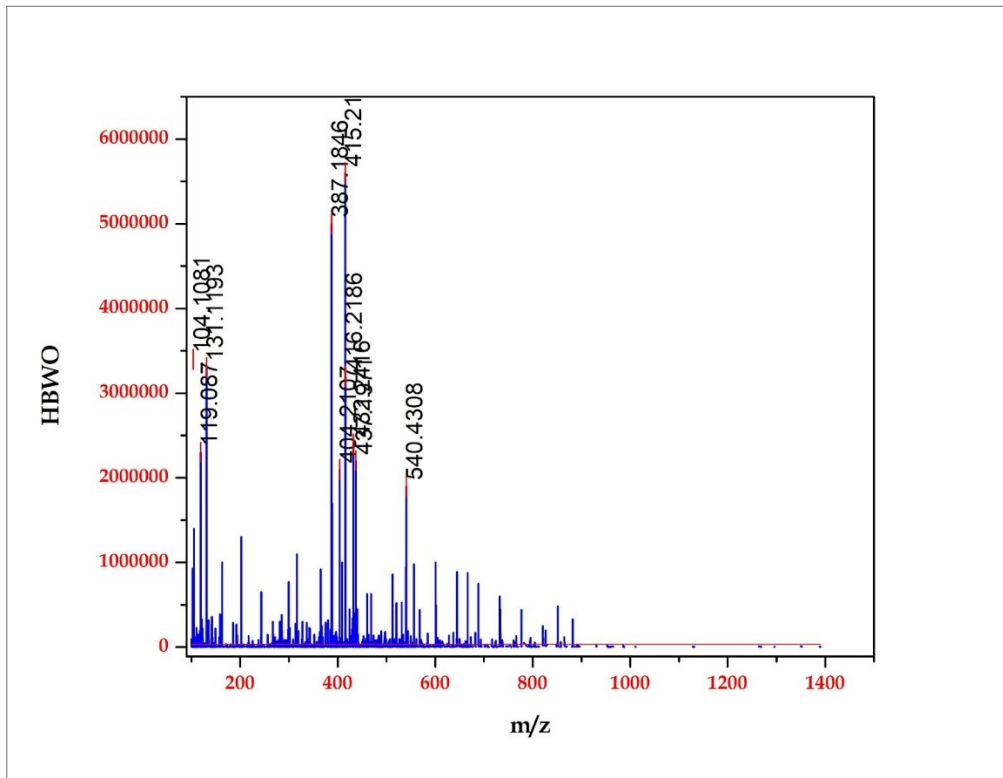


SF 2: TIC of an intra-cellular metabolite of control plants

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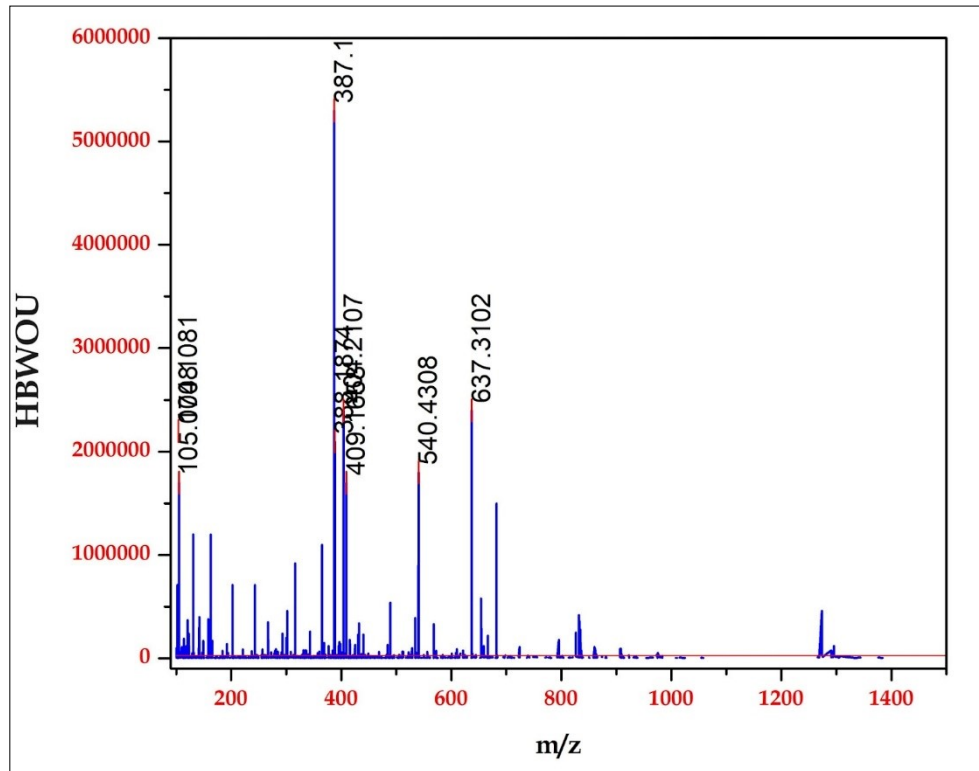


SF 3: TIC of an intra-cellular metabolite of plants treated with direct urea supply



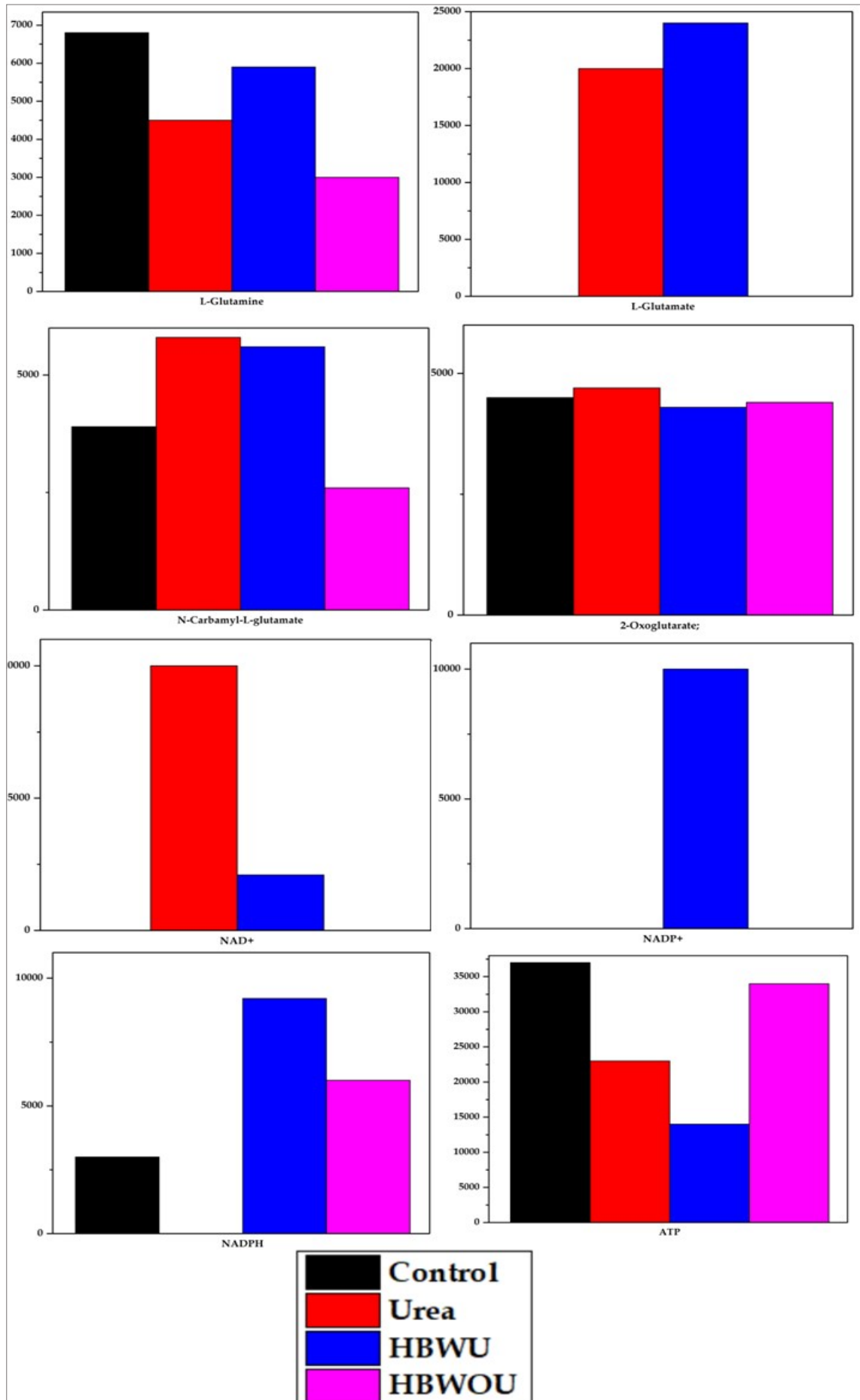
SF 4: TIC of an intra-cellular metabolite of plants treated with HBWU

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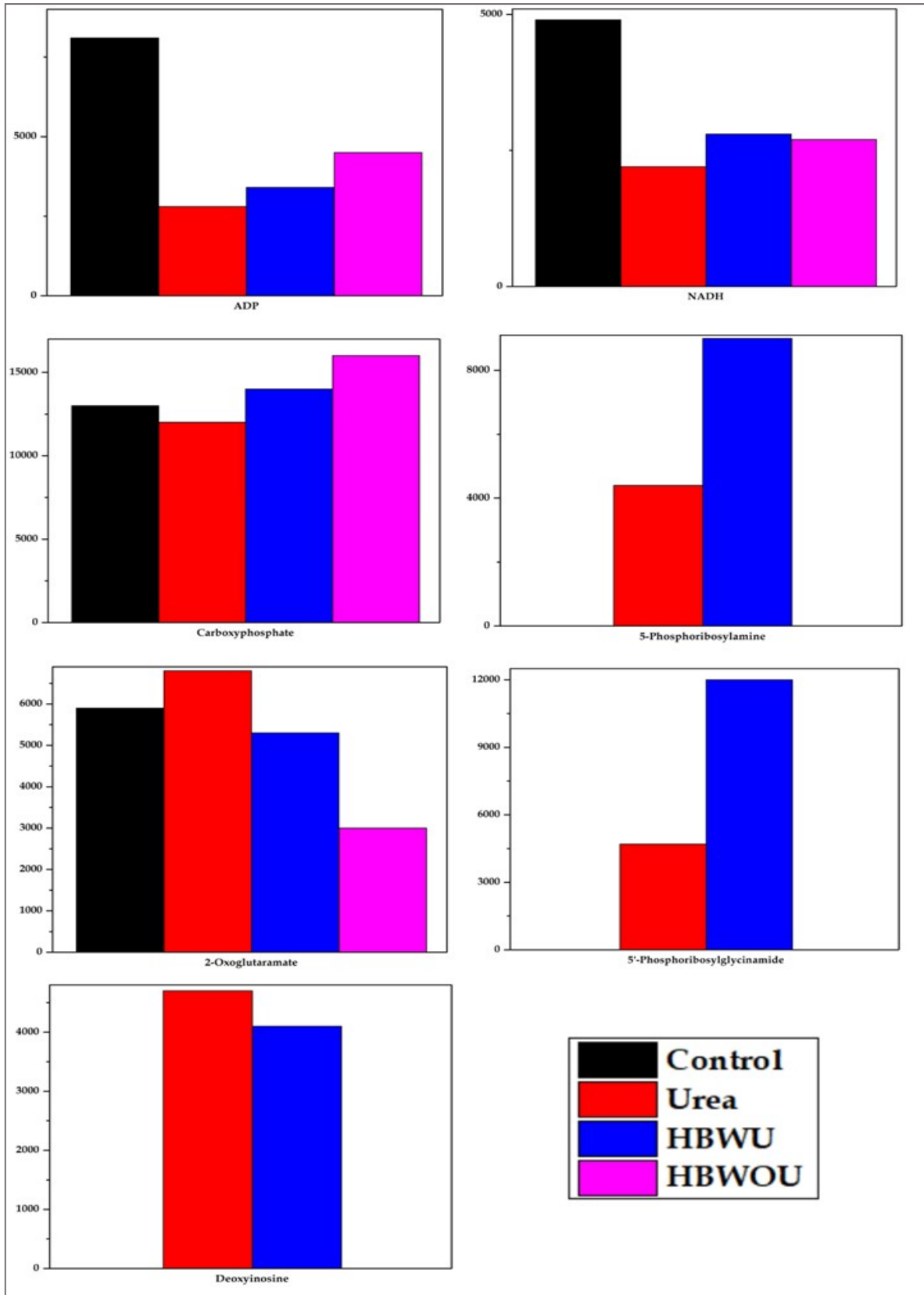


SF 5: TIC of an intra-cellular metabolite of plants treated with HBWOU

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SF 6: Relative abundance of up-regulated and down-regulated intra-cellular metabolites of control, urea, HBWU, and HBWOU-treated plants