



Figure 8. PST clearance results (global values) from live bivalves using H-form resin (**left**) and Na^+ -form resin (**right**). Natural clearance (without resin) is also presented for each set of experiments.

Table 2. PST concentrations, in $\mu\text{g STX.2HCl eqv/Kg}$ (average \pm SD), in mussels *Mytilus edulis* obtained from in vivo studies, in the absence of resin or in the presence of the H-form (2nd set) and Na^+ -form (3rd set) resins. At time 0 (day 6 of each experiment), no resin was present.

	2nd Set of Experiments							3rd Set of Experiments						
	Without Resin				With H-Form Resin			Without Resin				With Na^+ -Form Resin		
	0 h	24 h	48 h	70 h	24 h	48 h	70 h	0 h	24 h	48 h	24 h	48 h	24 h	48 h
C1&2	23 \pm 10	17 \pm 7	13 \pm 3	14 \pm 4	10 \pm 2	14 \pm 5	21 \pm 4	28 \pm 1	24 \pm 2	18 \pm 1	21 \pm 2	19 \pm 0		
dcSTX	841 \pm 113	598 \pm 73	567 \pm 71	563 \pm 73	505 \pm 36	540 \pm 67	627 \pm 106	853 \pm 10	782 \pm 32	703 \pm 23	711 \pm 19	686 \pm 9		
GTX5	18 \pm 4	15 \pm 4	13 \pm 2	14 \pm 4	11 \pm 1	13 \pm 3	19 \pm 3	18 \pm 1	16 \pm 1	14 \pm 1	15 \pm 1	16 \pm 0		
GTX6	87 \pm 1	83 \pm 1	79 \pm 1	82 \pm 2	81 \pm 1	78 \pm 1	84 \pm 2	82 \pm 5	78 \pm 0	80 \pm 0	82 \pm 5	79 \pm 0		
TOTAL	973 \pm 138	728 \pm 96	672 \pm 78	673 \pm 82	607 \pm 40	645 \pm 75	750 \pm 114	981 \pm 15	900 \pm 34	815 \pm 24	828 \pm 17	799 \pm 11		
Reducit. (%)	—	28 \pm 9	33 \pm 11	33 \pm 11	34 \pm 7	31 \pm 6	19 \pm 10	—	8 \pm 4	16 \pm 3	16 \pm 4	19 \pm 3		

3.3.1. Time 0 and Natural Depuration

The toxin profile of *G. catenatum* determined in this work (Section 3.2) was considered for comparison with the toxin profile in bivalves. For a better comparison, an estimate of the culture concentrations (in $\mu\text{g STX.2HCl eqv/Kg}$) is presented in Table S4. It is considered that the toxins quantified in mussels are the same as in culture, in agreement with previously reported results using similar conditions [28]. However, there are differences in the proportion of toxins between the different matrices (culture vs. bivalves). The general increase in the amount of toxins may be partially justified by the higher concentration of cells offered as food to the mussels, compared to the concentration used in the removal experiments in cultures. However, we observed that the ratio between the toxins quantified in mussels and in culture varies for each of them (C1&2 = 1.4, dcSTX = 3.4, GTX5 = 2.7, GTX6 = 2.0), suggesting that biotransformations occur in live mussels. In fact, several bioconversions among toxins in live bivalves have been reported [28,39–48]. Note that, for example, C1&2 and GTX5 have the same TEF [49] and dilution factor, so they would be similarly affected if there were no other factors involved. However, a higher production of GTX5 than C1,2 is observed, which is interesting since C1,2 toxins may generate GTX5 through reductive cleavage of the O-sulphate group at C11 [41]. At the same time, the