Supplementary Information (SI) for:

Temperature dependence of the pre-chromatographic 'Lawrence' method for bivalves contaminated with paralytic shellfish poisoning toxins

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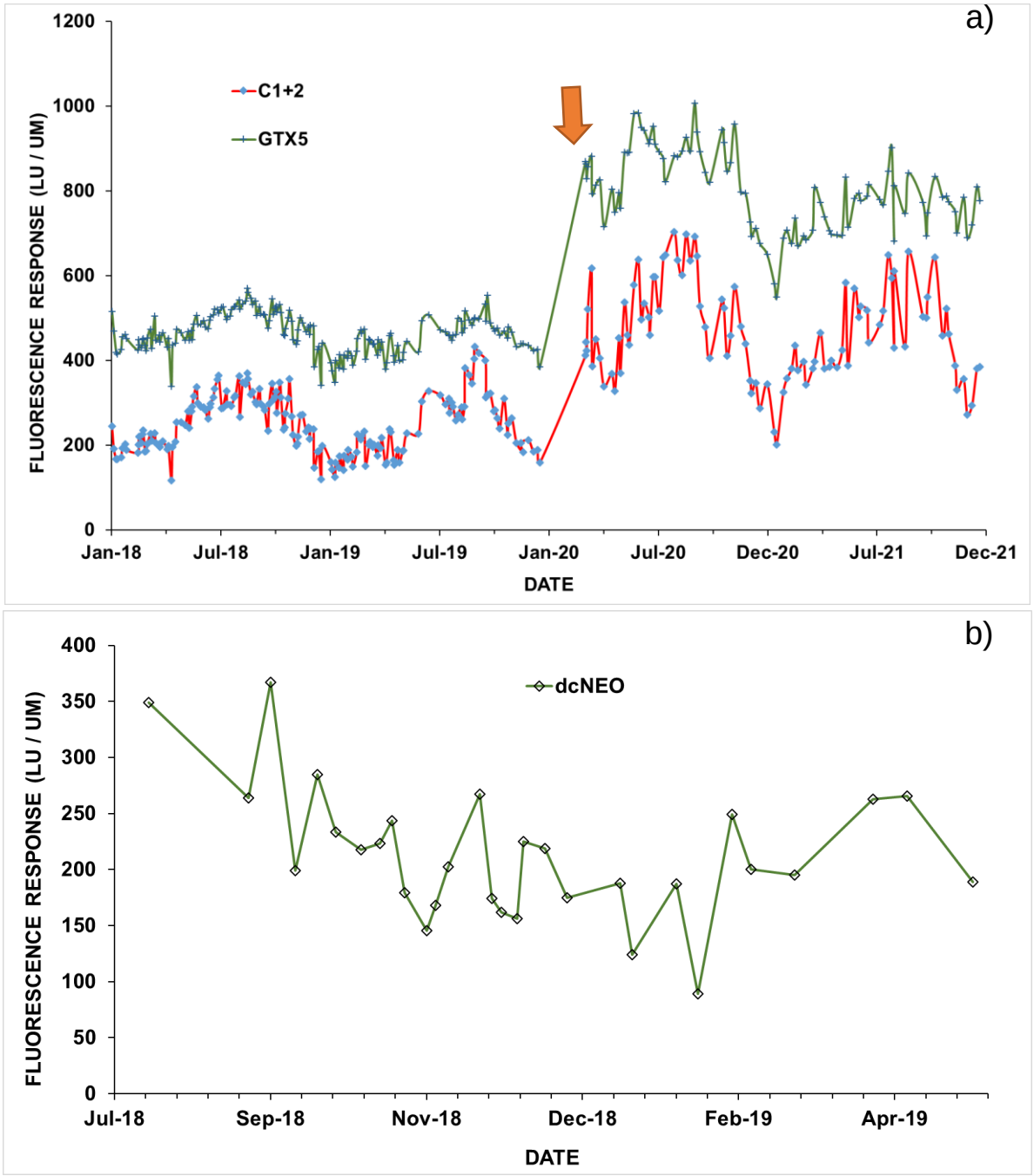

Fig. S1. a) Absolute fluorescence response of C1+2 and GTX5 calibration curve's slopes (expressed in LU/µM) between the years 2018 and 2021 (N=273). Orange arrow denotes the installation of a refurbished detector of the same Agilent 1260 Infinity I model, in March 2020. b) Absolute fluorescence response of dcNEO calibration curve's slopes between August 2018 and April 2019 (N=40).

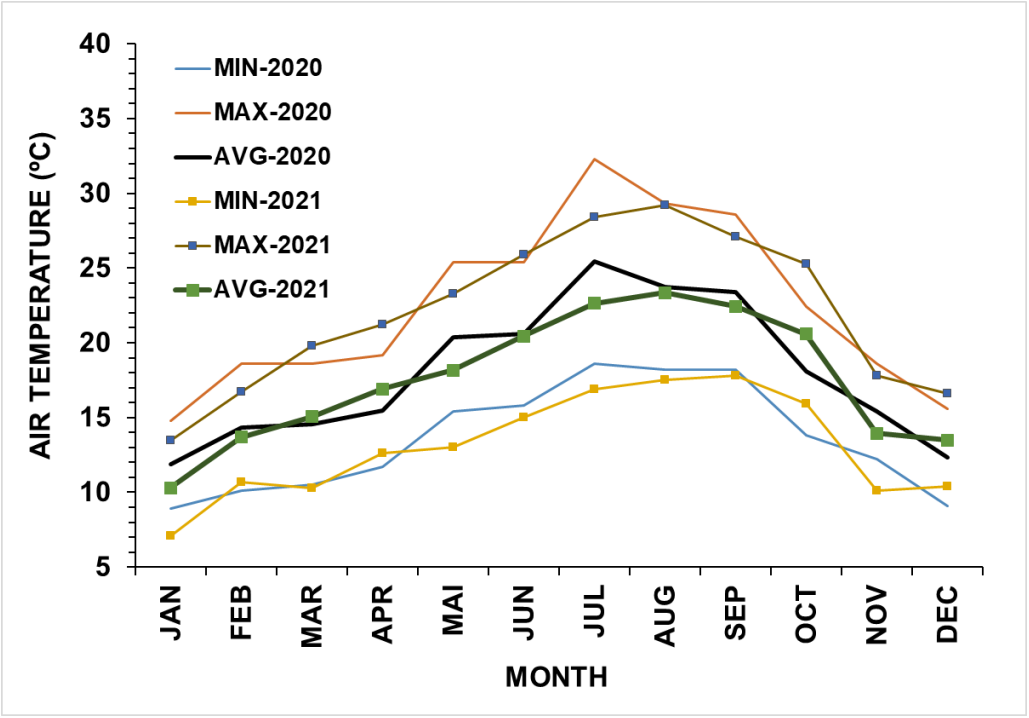

Fig. S2. Monthly average air temperature in Lisbon for the years 2020 and 2021. Min=minimal, Max=maxima, AVG=average (source: IPMA, 2024b)

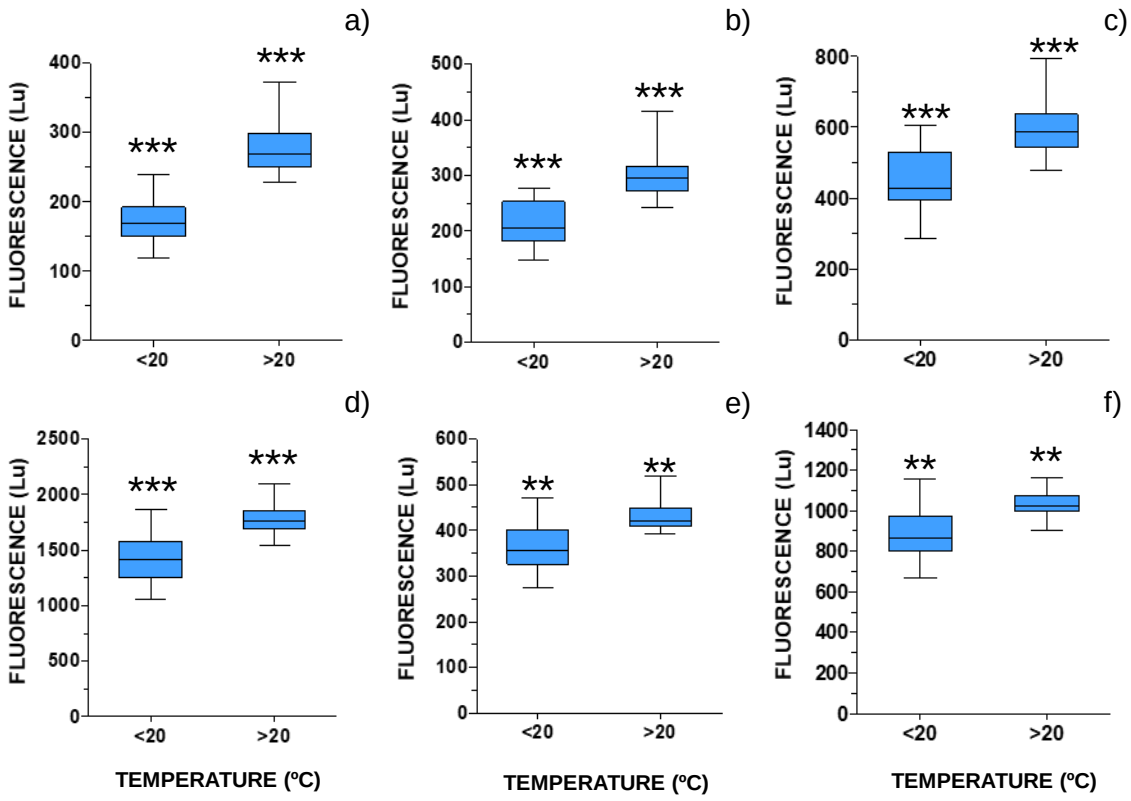

Fig. S3. Fluorescence response of calibration curves (slopes) obtained with the Agilent 1200 FLD model, distributed accordingly to a monthly average temperature cutoff of 20 ºC: a) dcGTX2+3, b) C1+2, c) GTX2+3, d) dcSTX, e) GTX5, f) STX. (N=40).

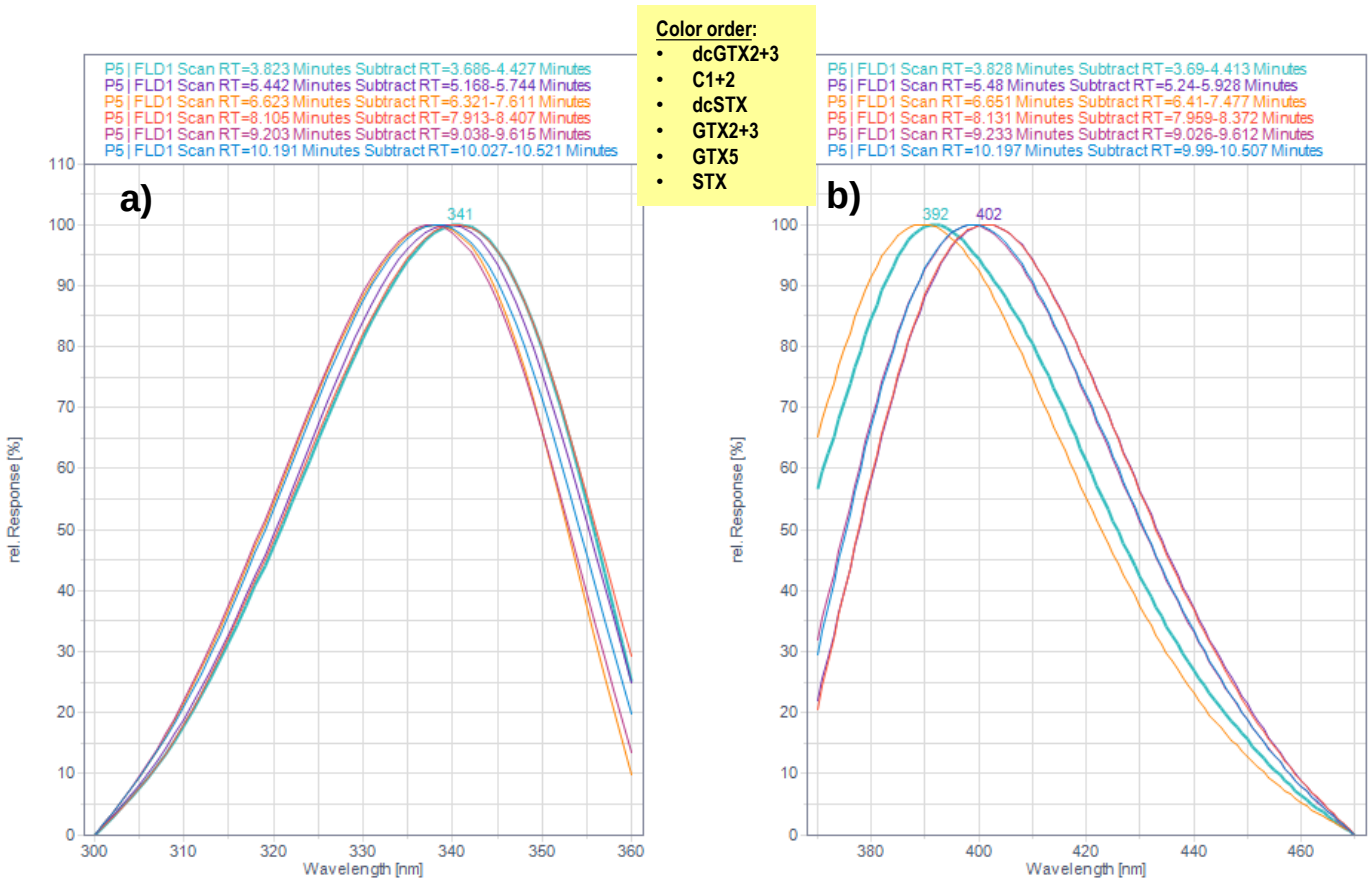

Fig. S4 Relative response of excitation (a) and emission (d) spectra of the highest calibration standard oxidized at room temperature with peroxide.

Spectra colors were ordered according to increasing retention time: dcGTX2+3 < C1+2 < dcSTX < GTX2+3 < B1 < STX.

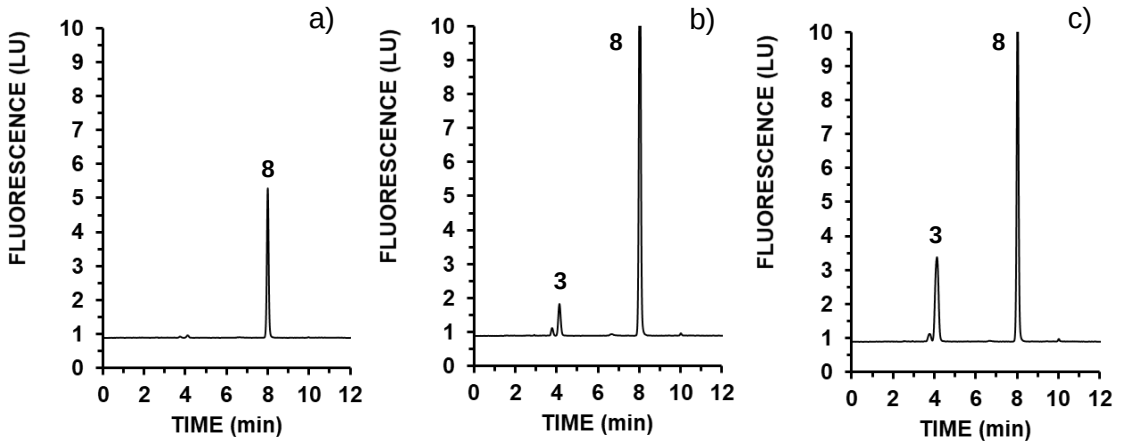

Fig. S5. Fluorescence response of GTX2+3 standard after peroxide reaction for: a) 2 min at room temperature, b) 3 min and heated at 40 ºC, c) 3 min and heated at 60 ºC. Peak numbering according to the elution order proposed by Lawrence et al. (1996).

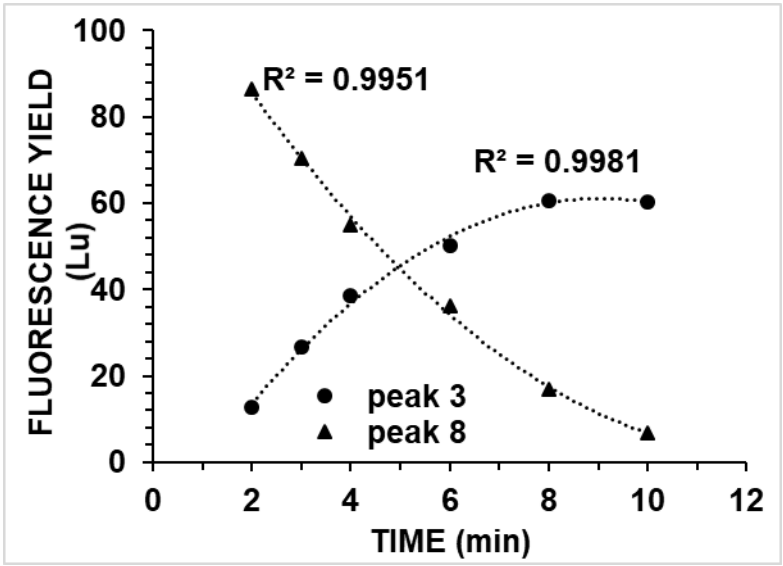

Fig. S6. Fluorescence response of GTX2+3 standard after peroxide reaction at 60 ºC in a dry heating block. Peak coded #8 in the elution order is the major peak produced by all GTXs, while peak coded #3 is the secondary peak normally produced only by GTX1+4 after periodate oxidation (Lawrence et al., 1996).