2 **Supplemental material**
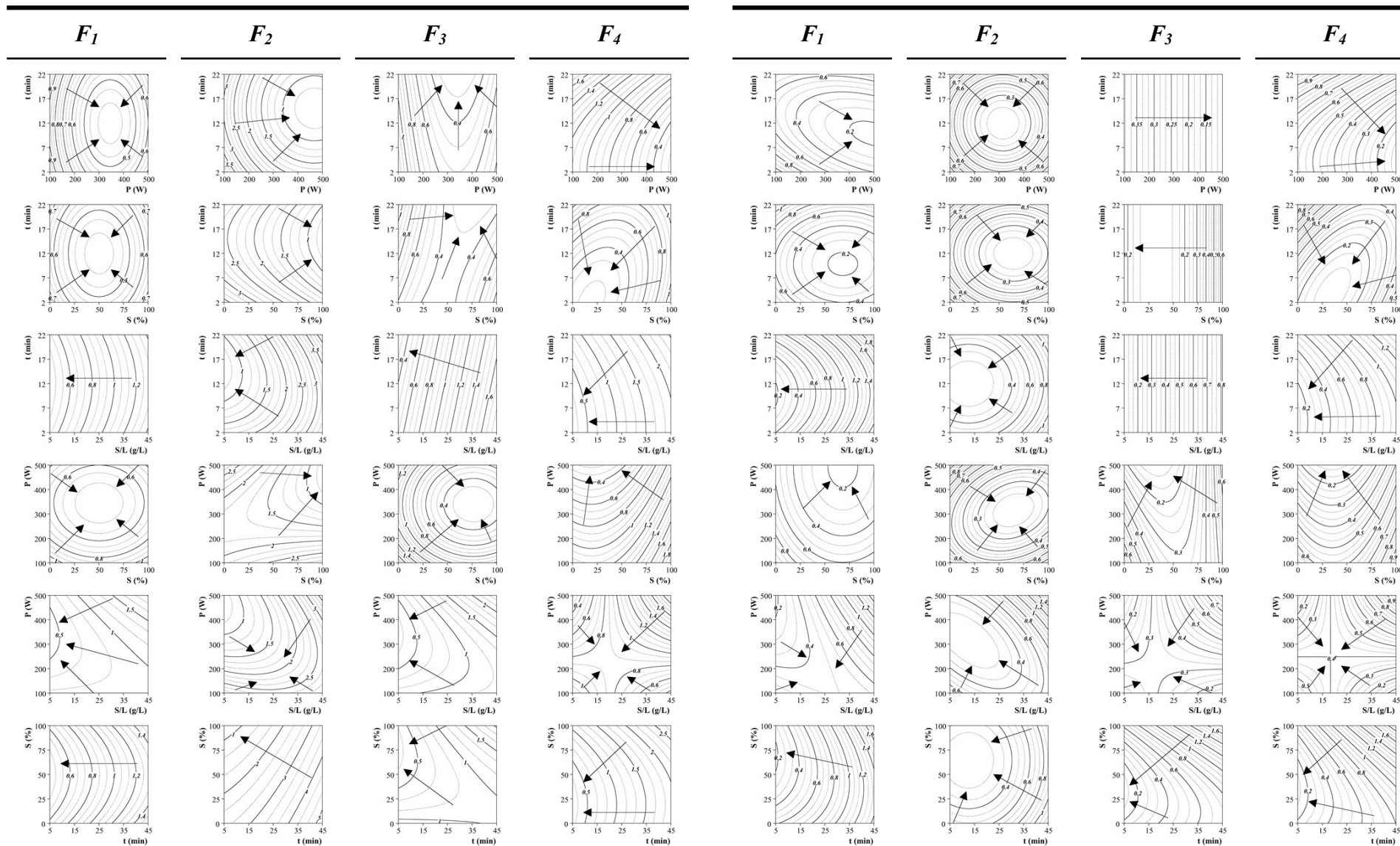

Figure A1. Contour plots for all the antifungal criteria (MIC and MFC) of all fungal strains used: *Aspergillus flavus* (F₁), *Aspergillus niger* (F₂), *Penicillium ochrochloron* (F₃) and *Penicillium verrucosum* var. *cyclopium* (F₄). For representation purposes, the variables excluded in each of the graphs were positioned at the optimal values of the others (**Table 3**). The obtained parametric fitting values are presented in **Table 2**.

3

Table A1: Coded and natural values of the optimization parameters used in the RSM analysis. The four independent variables X_1 (t, time in min), X_2 (P, power in W), X_3 (S, ethanol proportion in %) and X_4 (S/L, solid/liquid ratio in g/L) were combined in a five-level factorial design of 28 independent combinations and four replicates at the centre of the experimental domain.

CODED VALUES	NATURAL VALUES			
	X_1: t (min)	X_2: P (W)	X_3: S (%)	X_4: S/L (g/L)
-2	2	100	0	5
-1	7	200	25	15
0	12	300	50	25
+1	17	400	75	35
+2	22	500	100	45