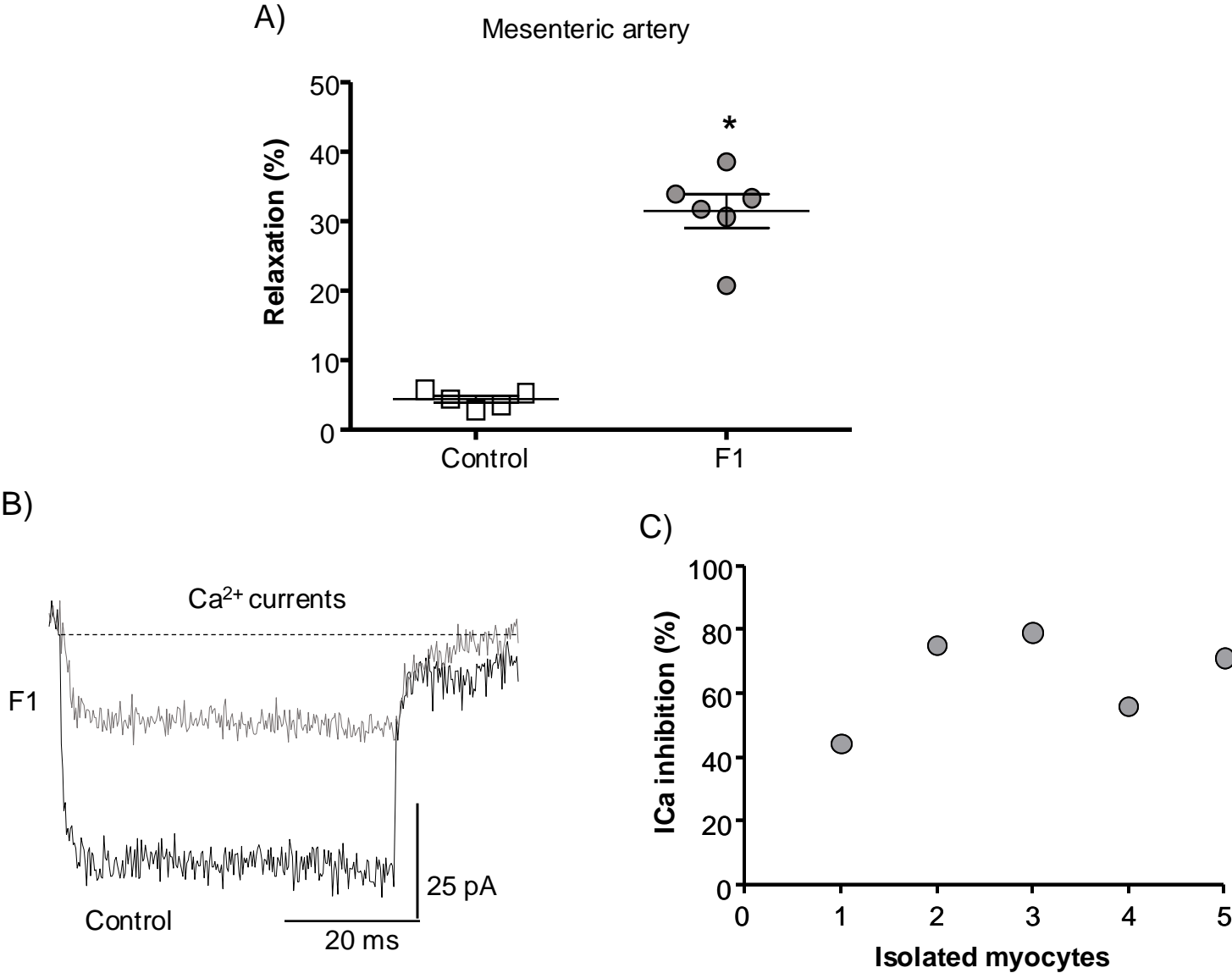


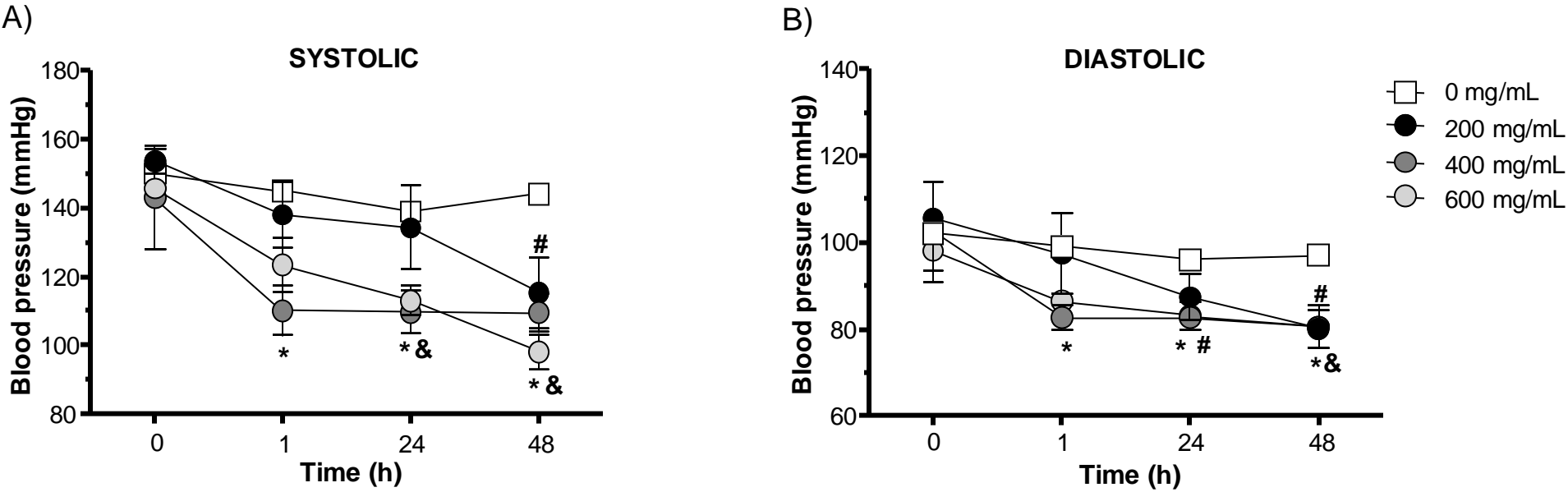
**Supplementary Figure S1.** Histological sections stained with hematoxylin-eosin. Representative images of (A) aortic ring with endothelium (E+,  $\rightarrow$ ) and (B) aortic ring without endothelium (E-).

FIGURA SUPLEMENTARIA

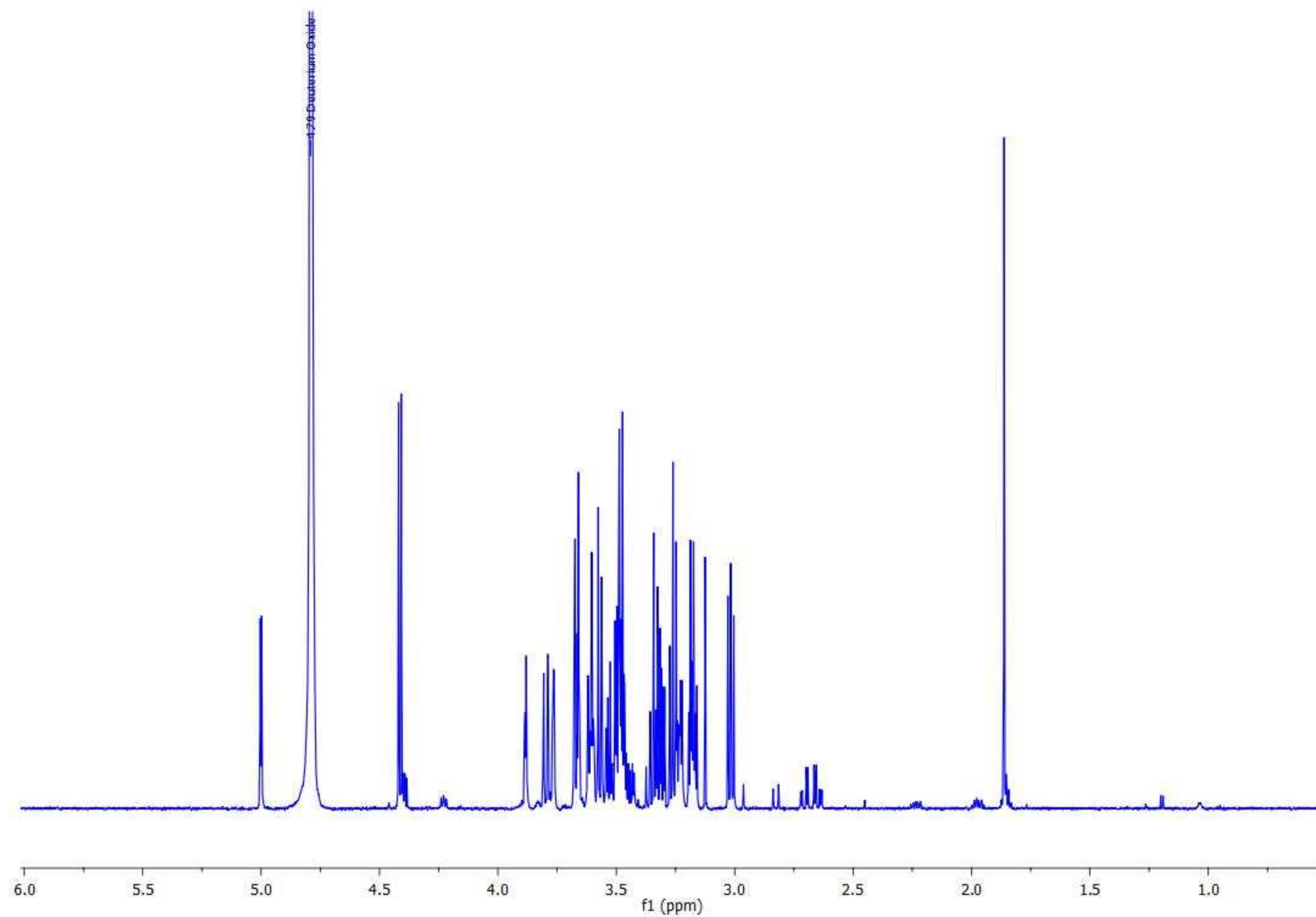


**Supplementary Figure S2.** Vasoactivity analysis of pitaya juice concentrate (PJC) fraction 1 (F1). (A) Percent relaxation of 5 mg/mL F1 on isolated rings of mesenteric artery previously contracted with phenylephrine (Phe, 10  $\mu$ M, n=6). (B) Representative traces of  $\text{Ba}^{2+}$  currents through the voltage-dependent  $\text{Ca}^{2+}$  channel of mesenteric myocytes recorded at +20 mV from a holding potential of -90 mV in the absence (control) and presence of F1 (20 mg/mL, n=5). (C) Percentage inhibition of  $\text{Ca}^{2+}$  currents (ICa) with F1 (20 mg/mL). Relaxation was calculated as a percentage of the initial contraction. Data are means  $\pm$  SEM. \*  $p < 0.05$  vs. Nph. Millivolts (mV), Picoamperes (pA), Milliseconds (ms).

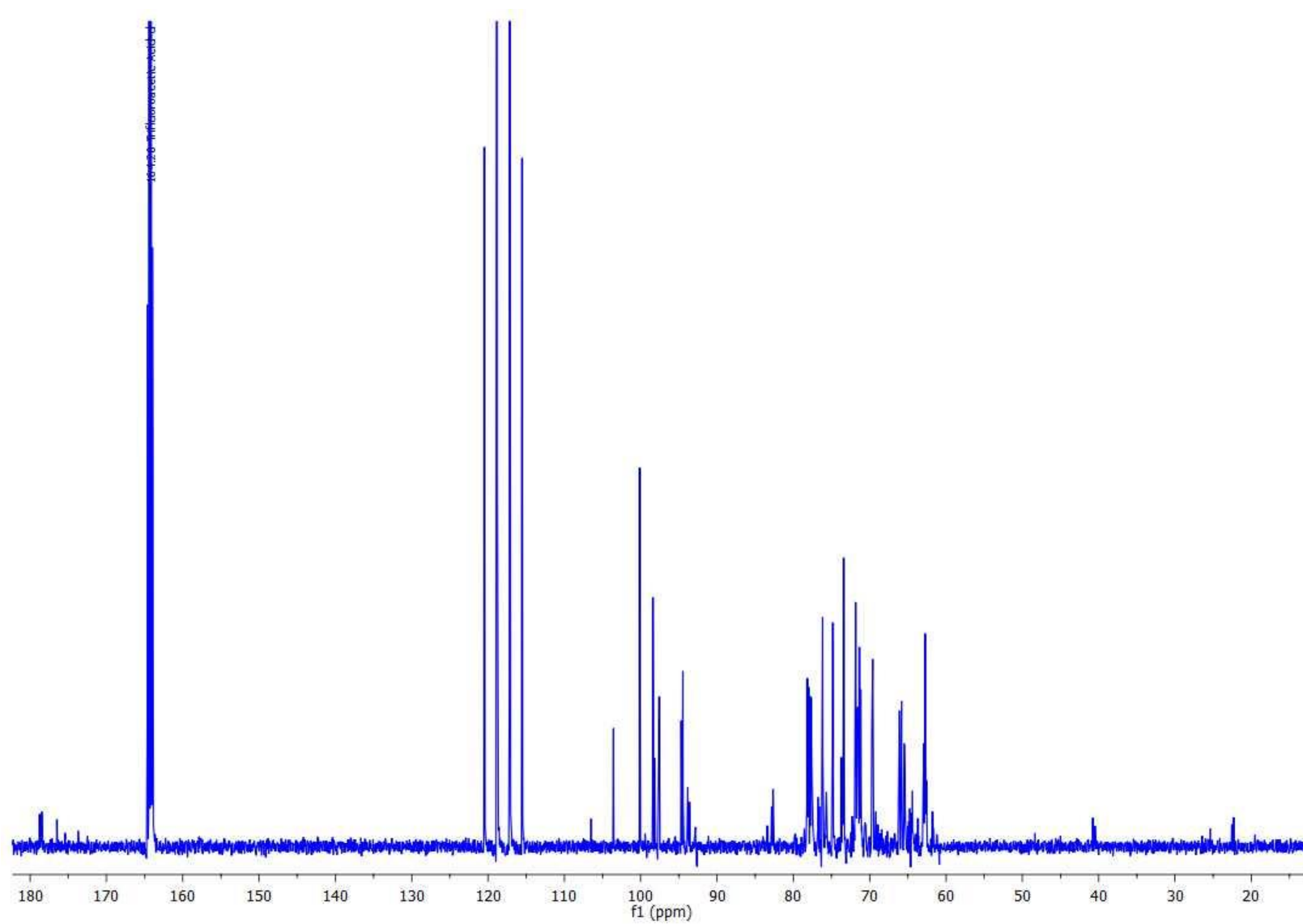
FIGURA SUPLEMENTARIA



**Supplementary Figure S3.** Pilot test of spontaneously hypertensive rats (SHR) administered with pitaya juice concentrate (PJC). A) Systolic blood pressure (B) Diastolic blood pressure. Blood pressure recording (mmHg) in SHR administered with increasing doses of PJC (0, 200, 400, 600 mg/mL). Recordings were made at 0, 1, 24 and 48 h, and the data are expressed as means  $\pm$  SEM (n=3). # p<0.05 vs. 200 mg/ml 0 h, \* p<0.05 vs. 400 mg/ml 0 h, & p<0.05 vs. 600 mg/ml 0 h.



**Supplementary Figure S4.**  $^1\text{H}$  NMR spectrum for F1 acquired at 700 MHz in  $\text{D}_2\text{O}$ /TFA-d 99.5:0



**Supplementary Figure S5.**  $^{13}\text{C}$  NMR spectrum for F1 acquired at 175 MHz in  $\text{D}_2\text{O}$ /TFA-d 99.5:0.5