Table. 3-1. PCR primer sequences and expected size of amplified products.

Primers	Sequence	Size (bp)	Ref.
α_2(I) collagen	sense - CGACTAAGTTGGAGGGAACGGTC	182	Frank *et al.* (2001)
	anti sense - TGGCATGTTGCTAGGCACGAC		
α_1(III) collagen	sense – CGAGGTGACAGAGGTGAAAGA	336	William *et al.* (1995)
	anti sense - AACCCAGTATTCTCCGCTCTT		
β-Actin	sense – GACTTCGAGCAAGAGATGGC	232	Nudel *et al.* (1983)
	anti sense - GCACTGTGTTGGCATAGAGG		

Table. 3-2. Effect of FMAC on DMN chronic treated rats liver SOD, Catalase, GSH-Px activities.

Group	Doses (g/kg/day)	SOD (U/mg protein)	Catalase (U/mg protein)	GSH-Px (U/mg protein)
Control		13.28 ± 1.4	33.42 ± 3.7	1110.7 ± 43.5
DMN + VEH		5.44 ± 0.27$^{###}$	17.22 ± 1.52$^{###}$	1189.6 ± 49.4
DMN + FMAC	0.5	6.21 ± 0.19	16.69 ± 2.05	1066.4 ± 58.4
DMN + FMAC	2.0	5.95 ± 0.62	19.88 ± 1.42	1096.9 ± 21.6

Values are mean ± S.E.(n = 7). $^{###}$P<0.001 compared with the control group. *P<0.05compared with the DMN + VEH group. VEH: vehicle; FMAC: filtrate of fermented mycelia of *Antrodia camphorata*

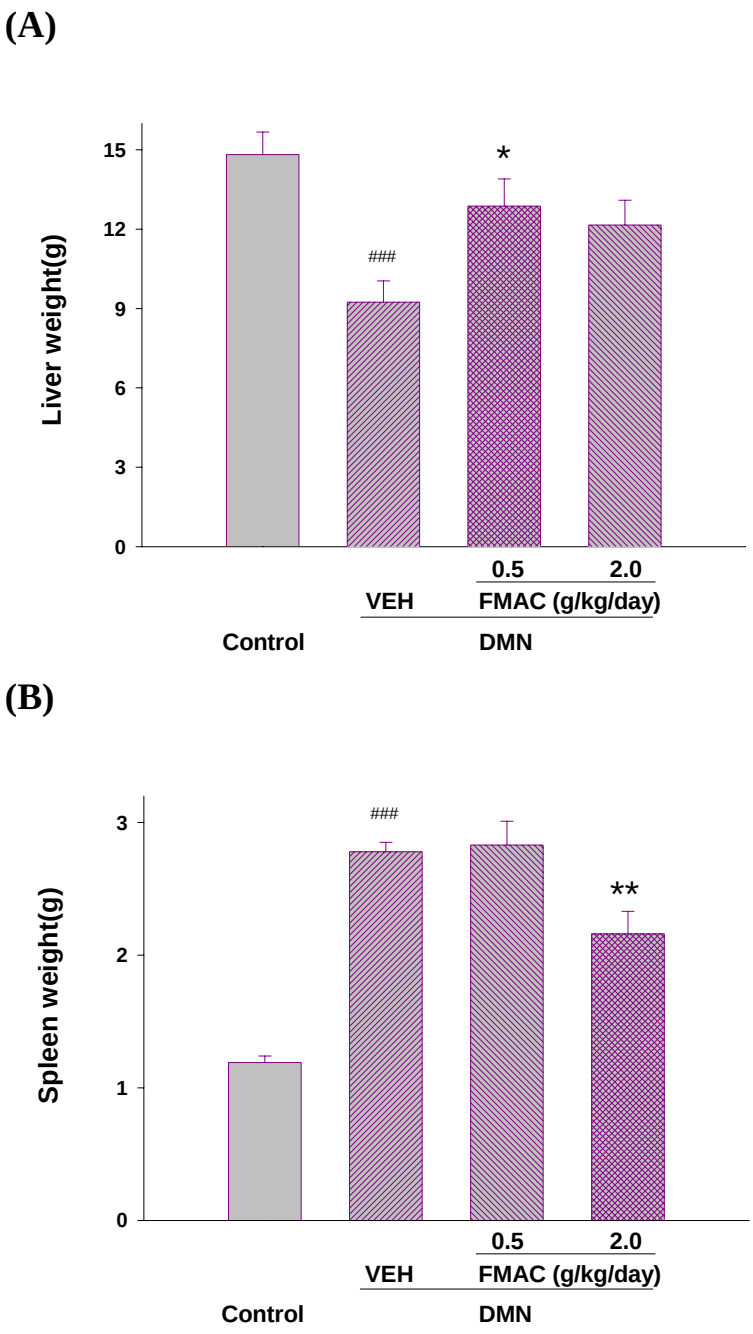


Fig. 3-1.

Effect of FMAC on liver weight (A) and spleen weight (B) in rats with chronic liver injury induced by DMN. Values are mean ± S.E. (n = 7). $^{###}P<0.001$ compared with the control group. $^{*}P<0.05$, $^{**}P<0.01$ compared with the DMN + VEH group. VEH: vehicle; FMAC: filtrate of fermented mycelia of *Antrodia camphorata*

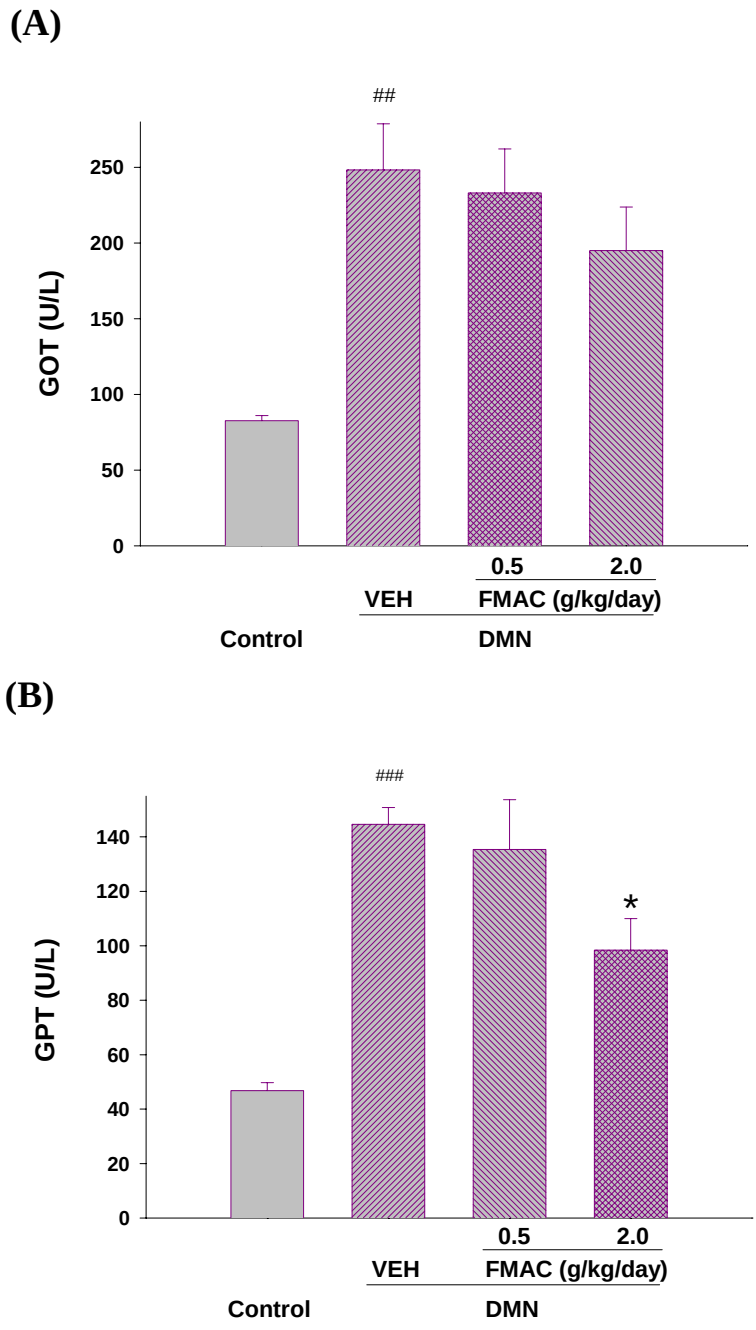
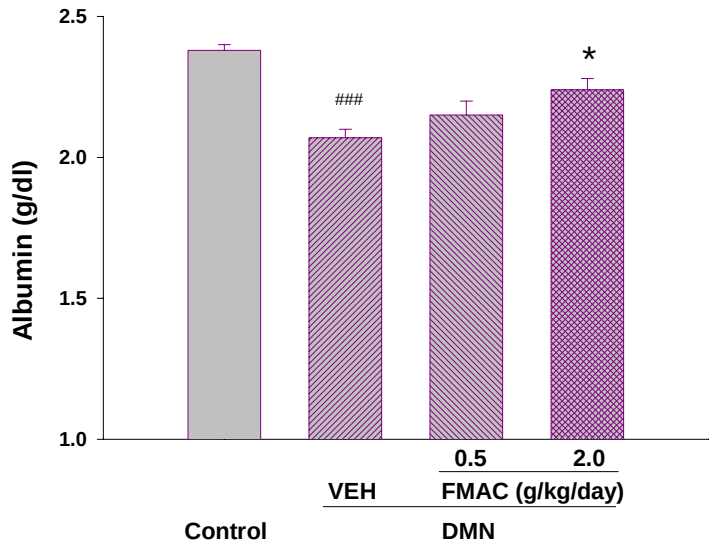


Fig. 3-2.

Effect of FMAC on serum GOT (A) and GPT (B) activities in rats with chronic liver injury induced by DMN. Values are mean ± S.E.(n = 7). $^{\#\#}P<0.01$, $^{\#\#\#}P<0.001$ compared with the control group. $^{*}P<0.05$compared with the DMN + VEH group. VEH: vehicle; FMAC: filtrate of fermented mycelia of *Antrodia camphorata*

(A)



(B)

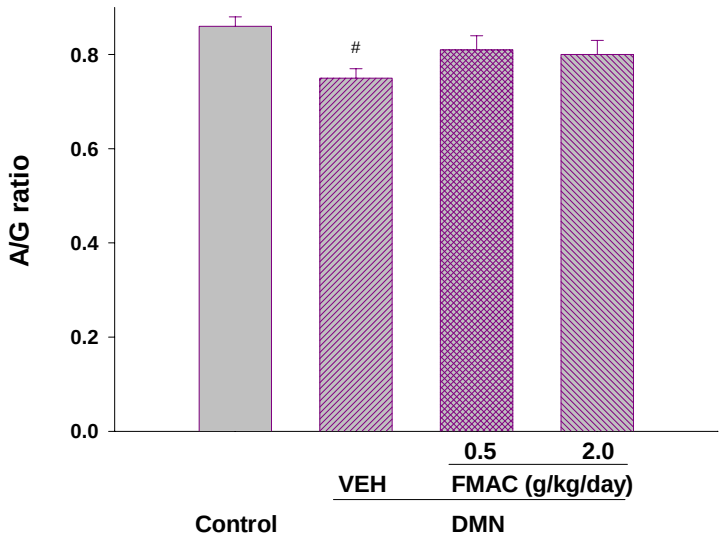


Fig. 3-3.

Effect of FMAC on serum albumin (A) and A/G ratio (B) in rats with chronic liver injury induced by DMN. Values are mean ± S.E. (n = 7). $^{\#}P< 0.05$, $^{\#\#\#}P< 0.001$ compared with the control group. $^{*}P<0.05$compared with the DMN + VEH group. VEH: vehicle; FMAC: filtrate of fermented mycelia of *Antrodia camphorata*

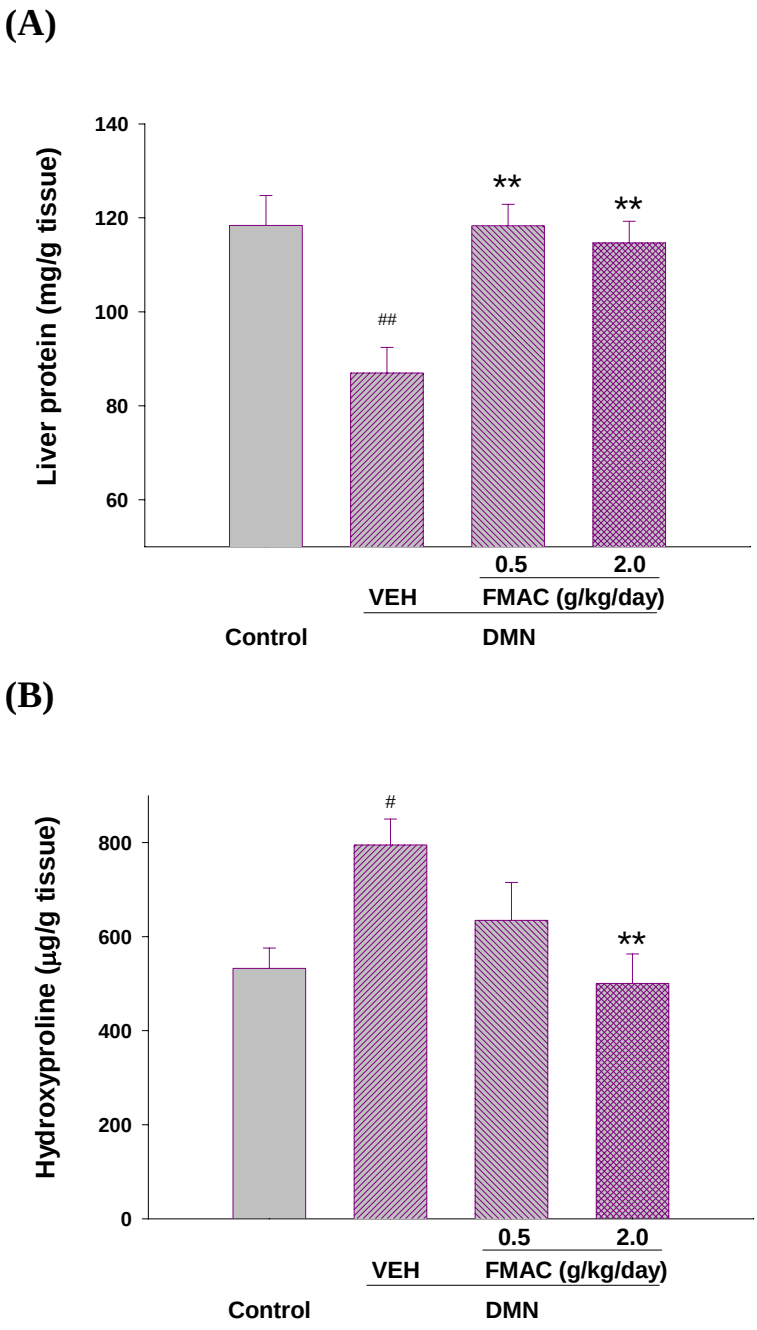
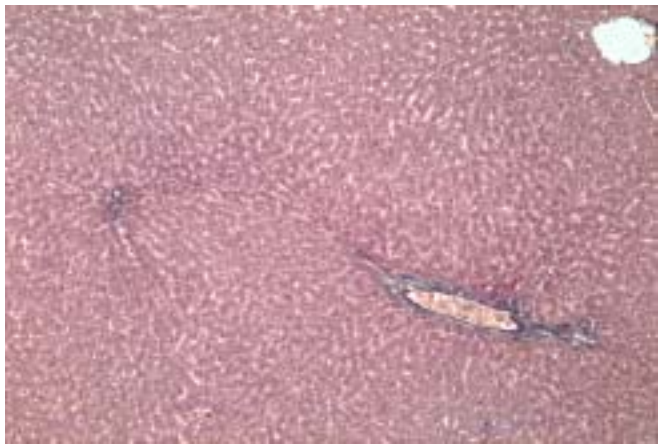


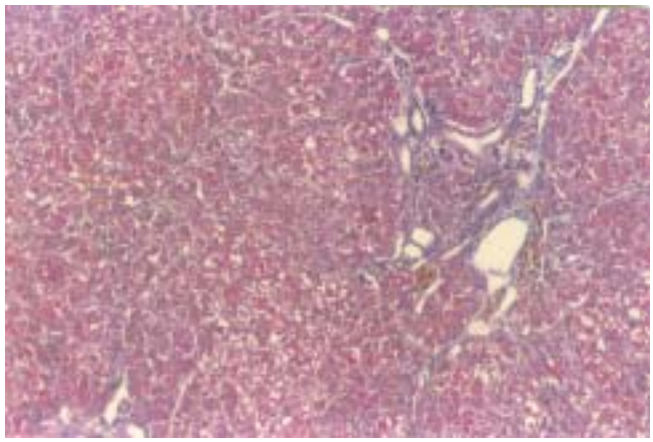
Fig. 3-4.

Effect of FMAC on DMN chronic treated rats liver protein (A) and hydroxyproline (B) contents. Values are mean ± S.E. (n = 7). $^{\#}P<0.05$, $^{\#\#}P<0.01$ compared with the control group. $^{**}P<0.01$ compared with the DMN + VEH group. VEH: vehicle; FMAC: filtrate of fermented mycelia of *Antrodia camphorata*

(A)



(B)



(C)

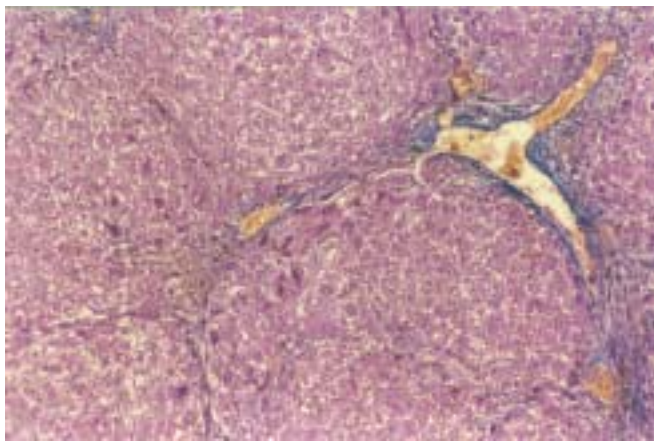


Fig. 3-5.

The photomicrographs of liver section taken from rats and stained with Masson’s trichrome.. (A) Normal control (B) DMN. Note that displaying bundles of collagen surrounding the lobules, with hemorrhage and necrosis was observed. (C) DMN + FMAC 2.0 g/kg/day.

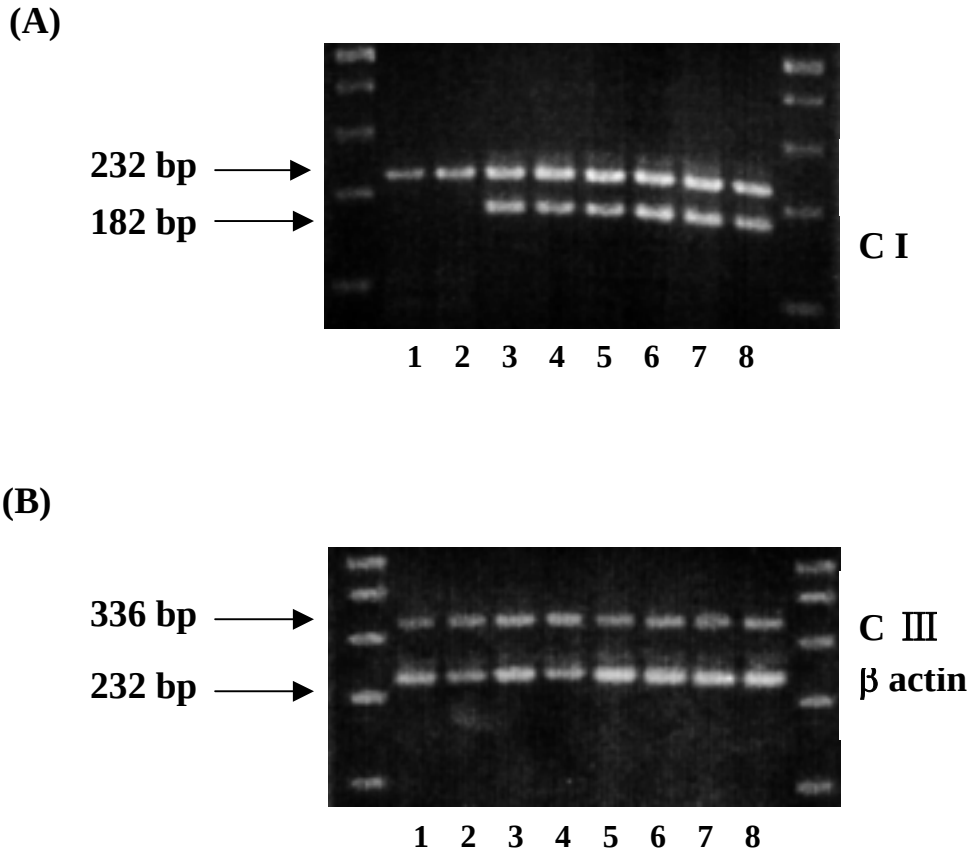


Fig. 3-6.

RT-PCR products analysis of FMAC effect on liver type I (A) and type III (B) collagen contents in rats with chronic liver injury induced by DMN. After amplification, each sample was applied to 2% agarose/ethidium bromide gel and electrophoresed. RT-PCR products were quantified by β-actin internal standards. Land 1and 2: control; 3 and 4: DMN + VEH ; 5 and 6: DMN + 0.5g/kg/day FMAC; 7 and 8: DMN + 2.0g/kg/day FMAC. VEH: vehicle; FMAC: filtrate of fermented mycelia of *Antrodia camphorata*

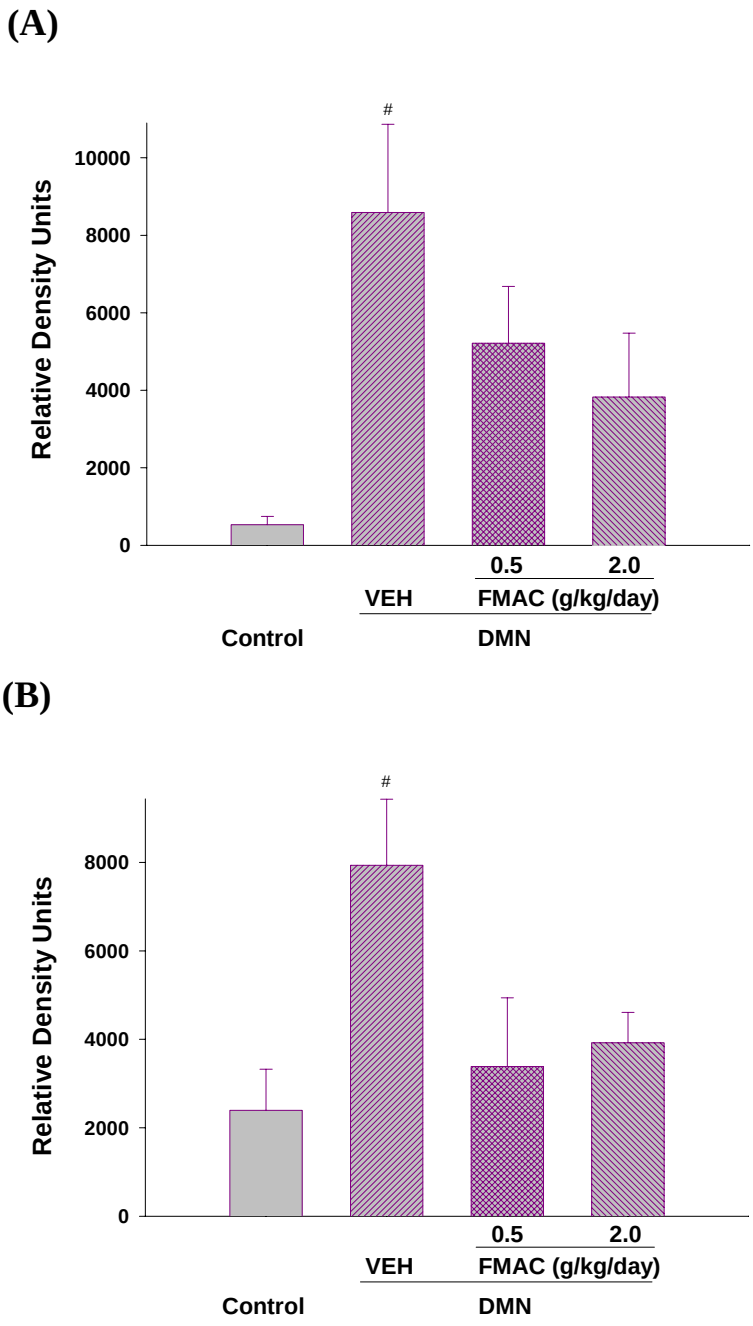


Fig. 3-7.

RT-PCR products analysis of FMAC effect on liver type I (A) and type III (B) collagen contents in rats with chronic liver injury induced by DMN. Results are expressed as relative density units quantified to β-actin. This experiment was performed in triplicate. Values are mean ± S.E. (n = 4).

$^{\#}P < 0.05$ compared with the control group.