

Figure 1. Structure and UV/visible spectrum of rotenone. Asterisk denotes the position of the carbonyl group.

Table 23. Comparative adsorption and desorption of sterilized and unsterilized sediments at pH 7.

Sediment source	Adsorption ( $\mu\text{g/g}$ )		Desorption (%)	
	Unsterile	Sterile	Unsterile	Sterile
Mississippi River (RM 707)	0	0	--	--
Mississippi River (RM 704)	9.21	9.16	2.7	2.9
Arkansas	7.73	7.66	10.4	9.5
Chocolay River	8.69	8.75	2.7	3.2
Ford River	8.37	8.43	21.9	4.4

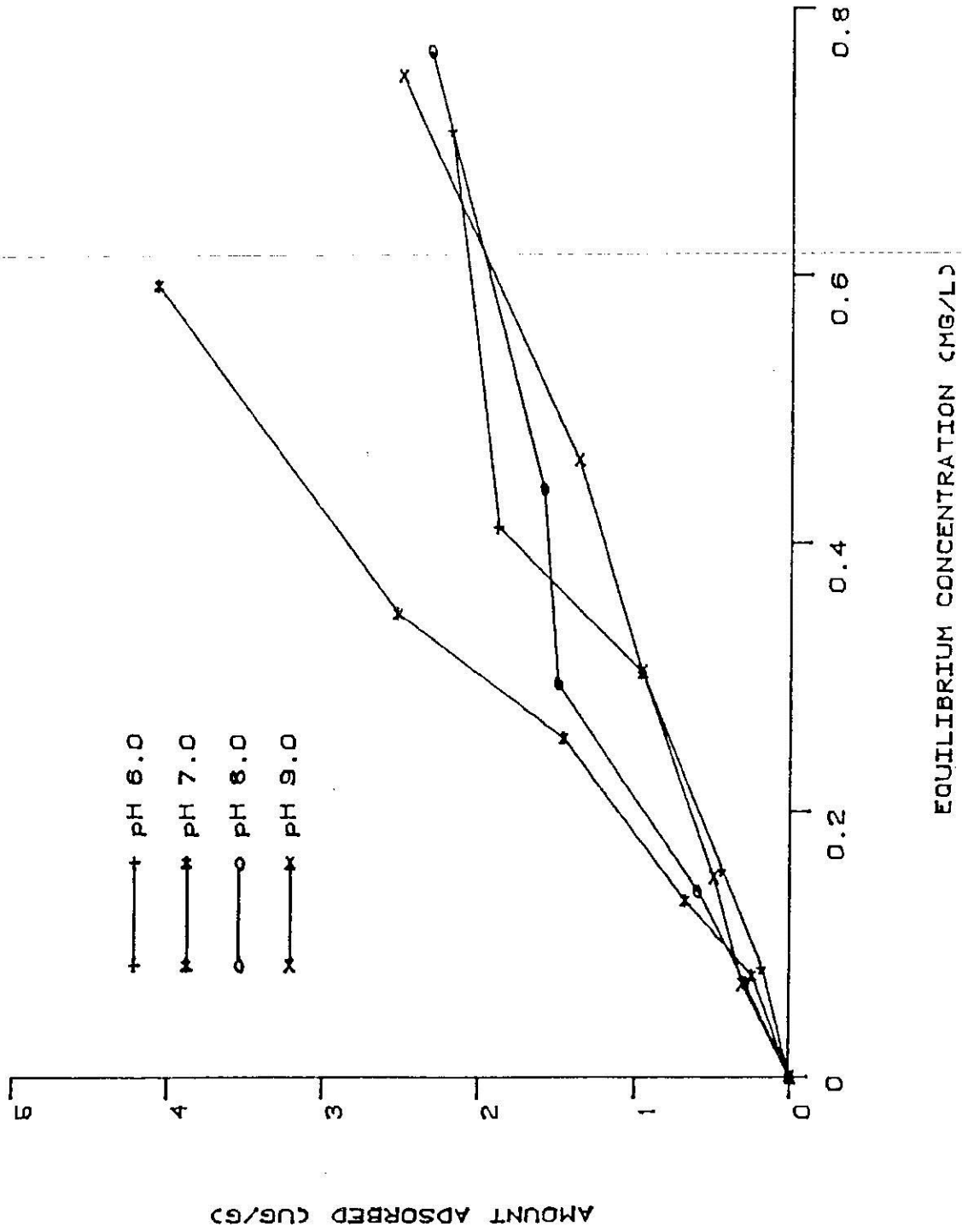


Figure 2. Adsorption equilibria for  $^{14}\text{C}$ -rotenone by sediments from the Mississippi River main channel (River mile 707) at  $5^\circ\text{C}$  and four pH's.

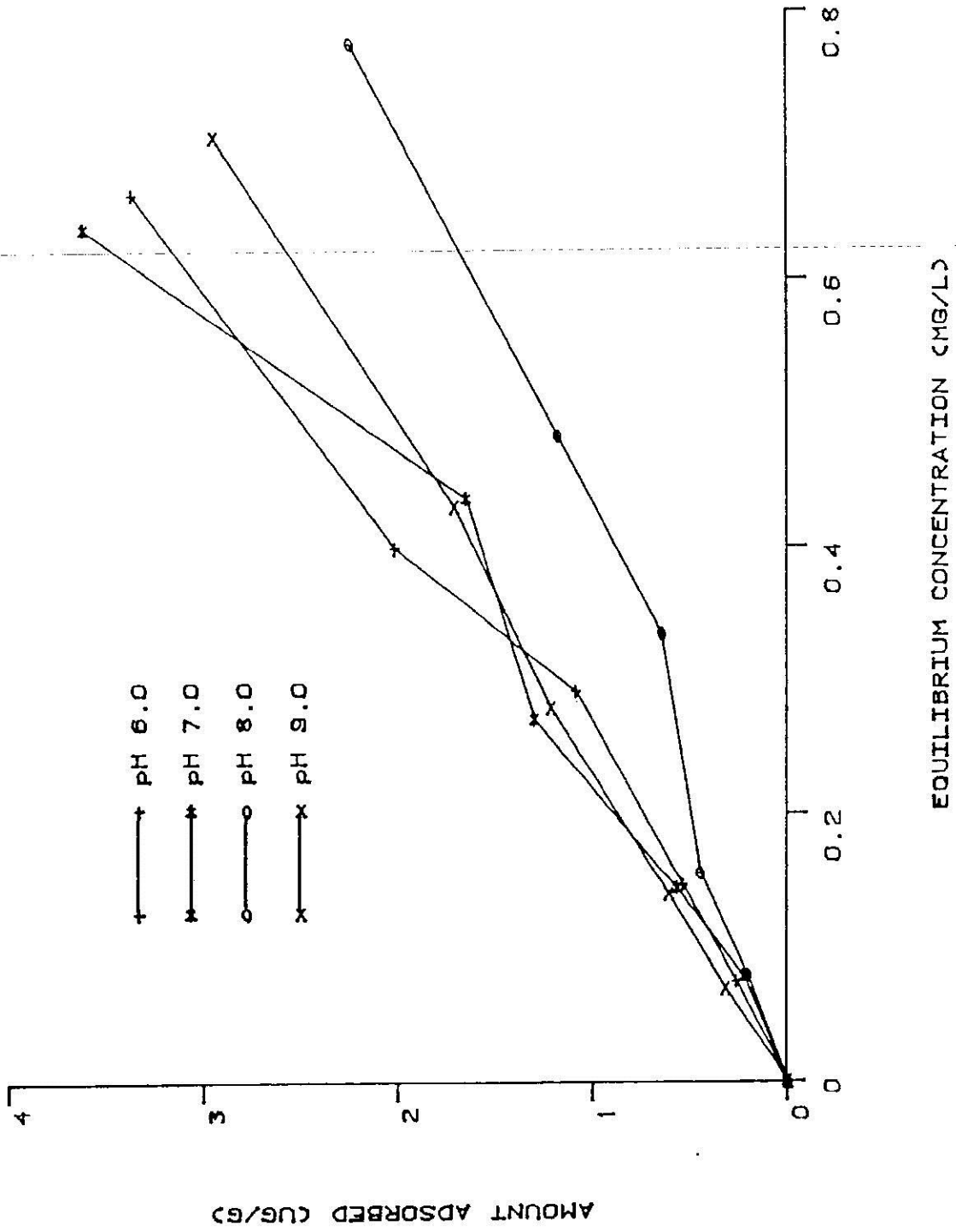


Figure 3. Adsorption equilibrium for <sup>14</sup>C-rotenone by sediments from the Mississippi River main channel (River mile 707) at 20°C and four pH's.

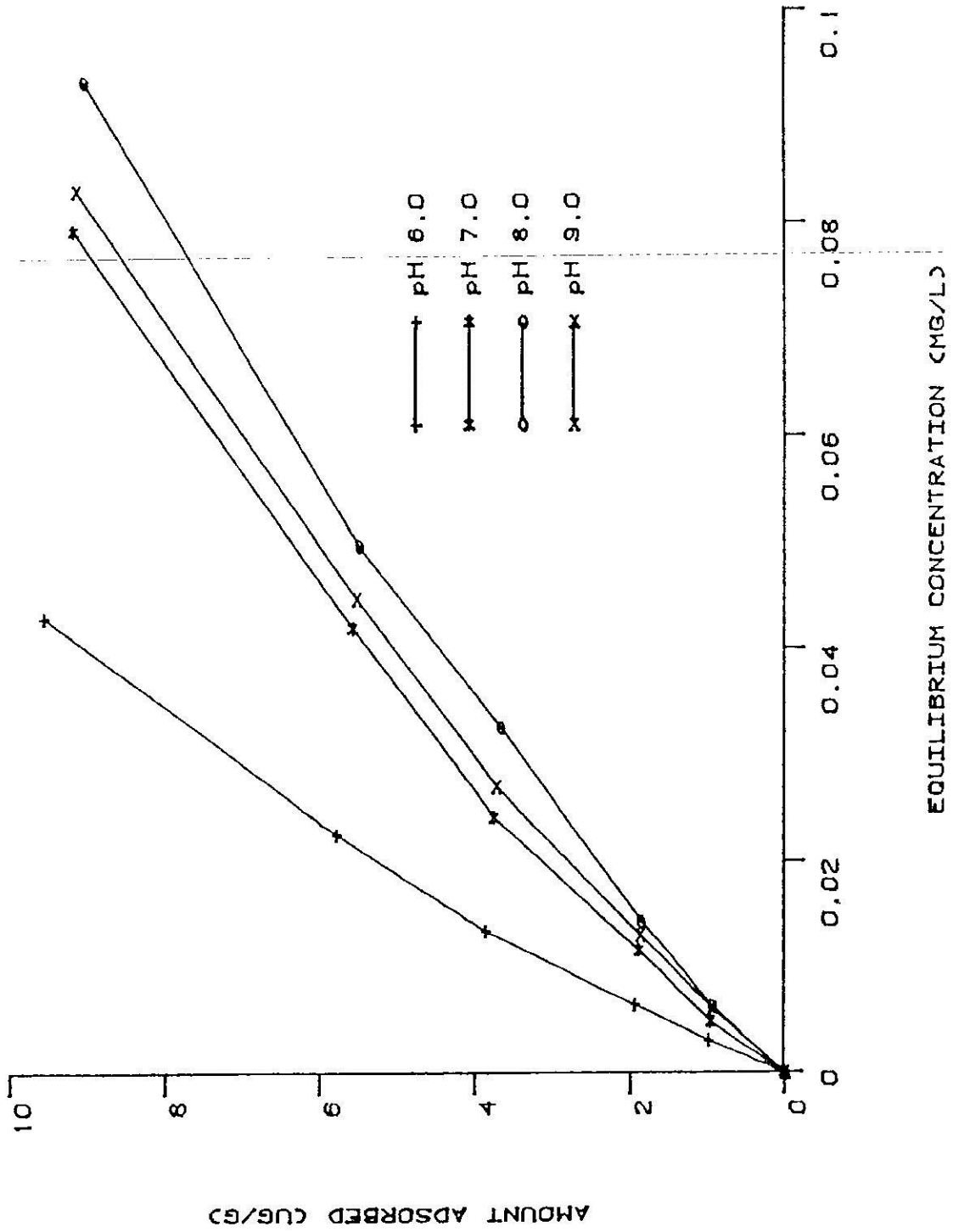


Figure 4. Adsorption equilibria for <sup>14</sup>C-rotenone by sediments from the Mississippi River backwater (River mile 704) at 5°C and four pH's.

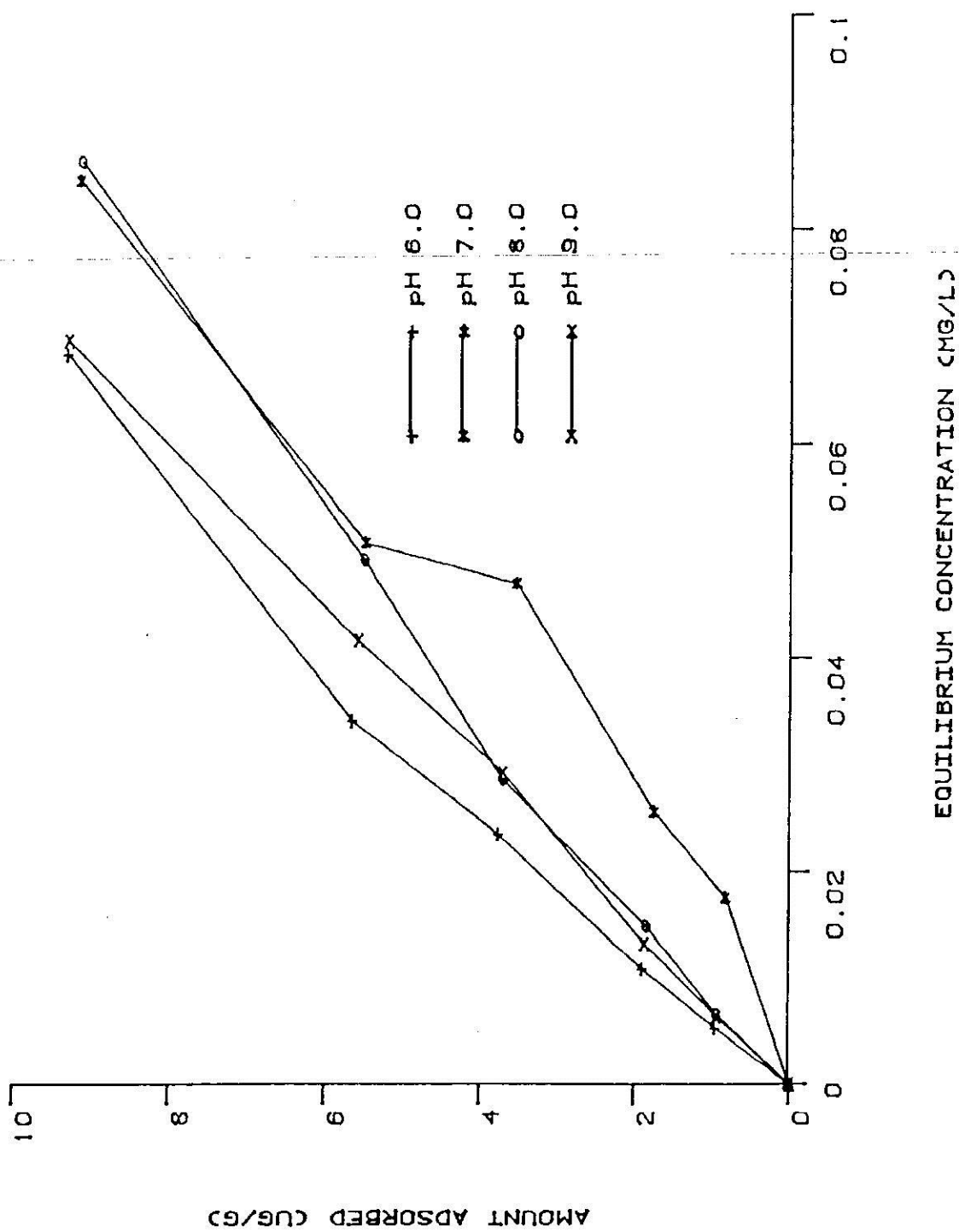


Figure 5. Adsorption equilibrium for  $^{14}\text{C}$ -rotenone by sediments from the Mississippi River backwater (River number 704) at  $20^\circ\text{C}$  and four pH's.

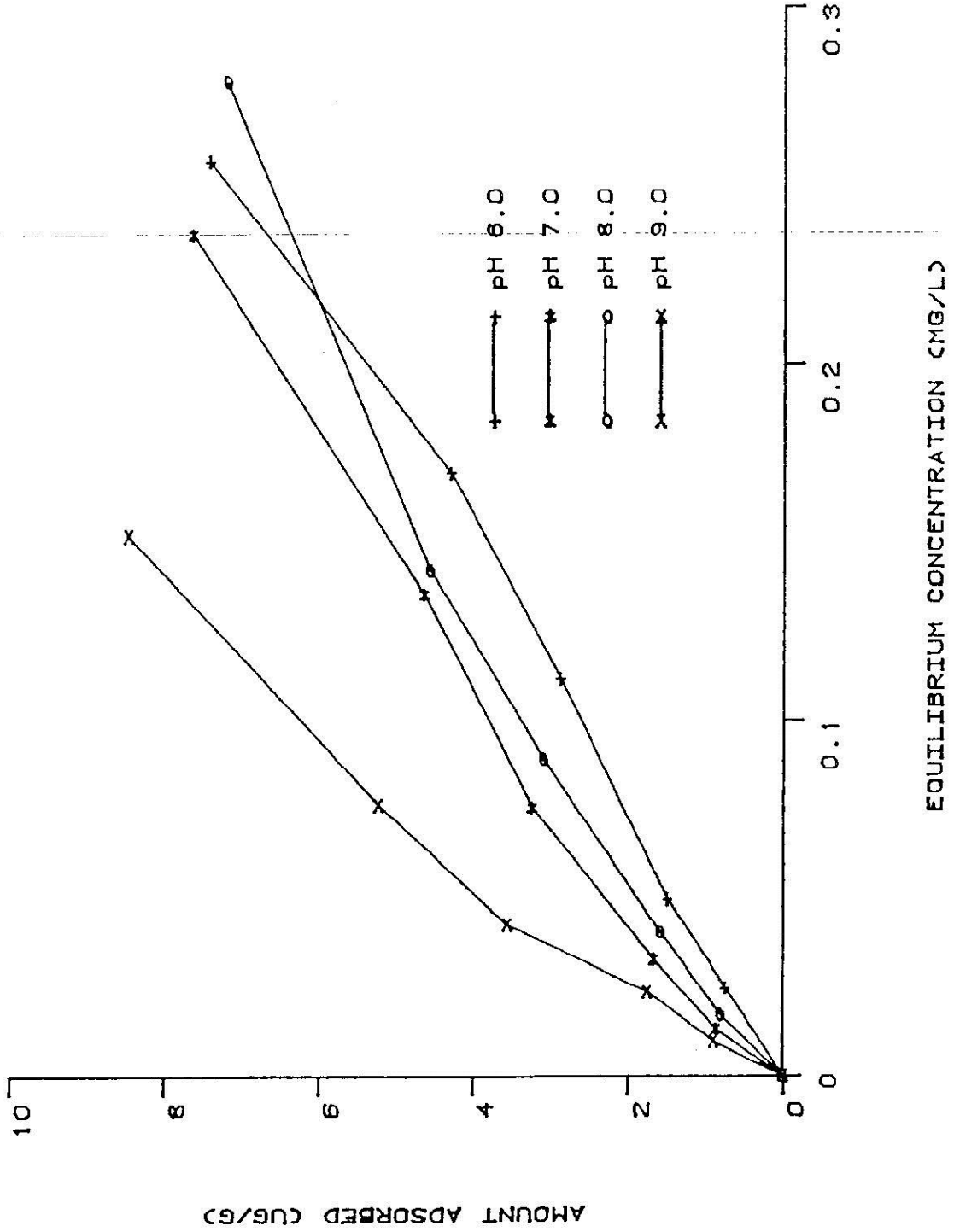


Figure 6. Adsorption equilibria for <sup>14</sup>C-rotenone by sediments from the Rice Branch Experiment Station, Arkansas, at 5°C and four pH's.

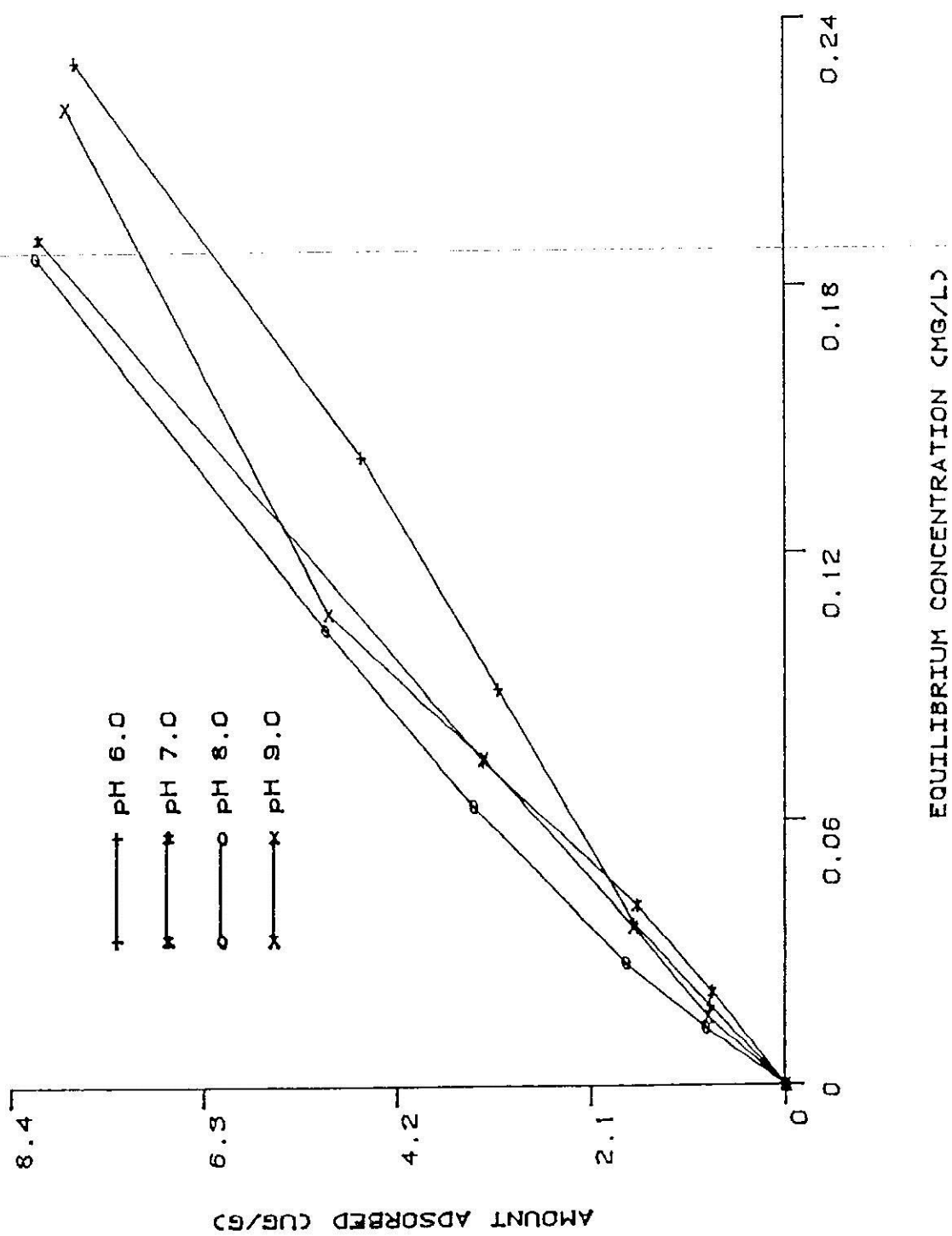


Figure 7. Adsorption equilibrium for  $^{14}\text{C}$ -rotenone by sediments from the Rice Branch Experiment Station, Arkansas at  $20^\circ\text{C}$  and four pH's.



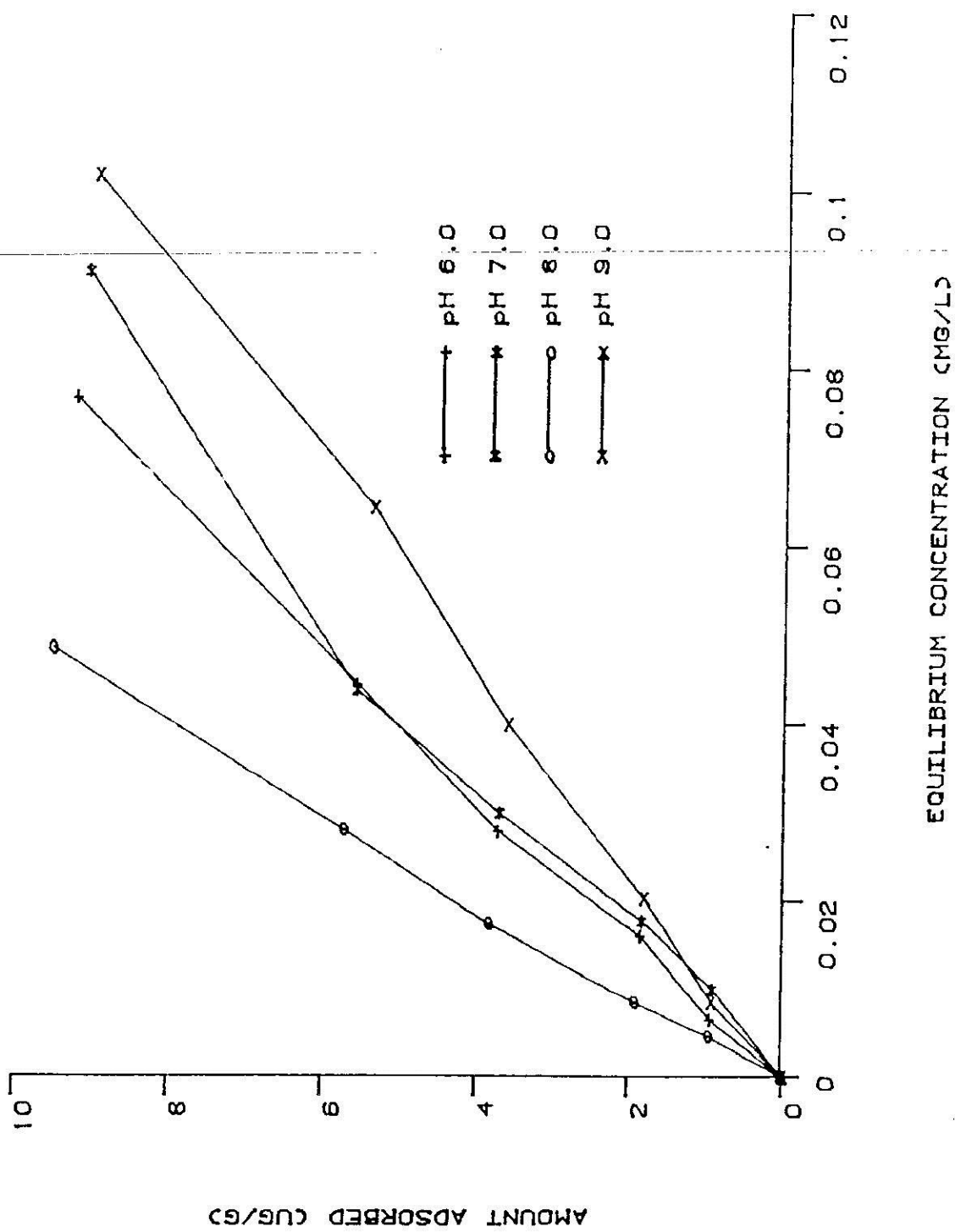


Figure 8. Adsorption equilibria for <sup>14</sup>C-rotenone by sediments from the Chocollay River, Michigan, at 5°C and four pH's.

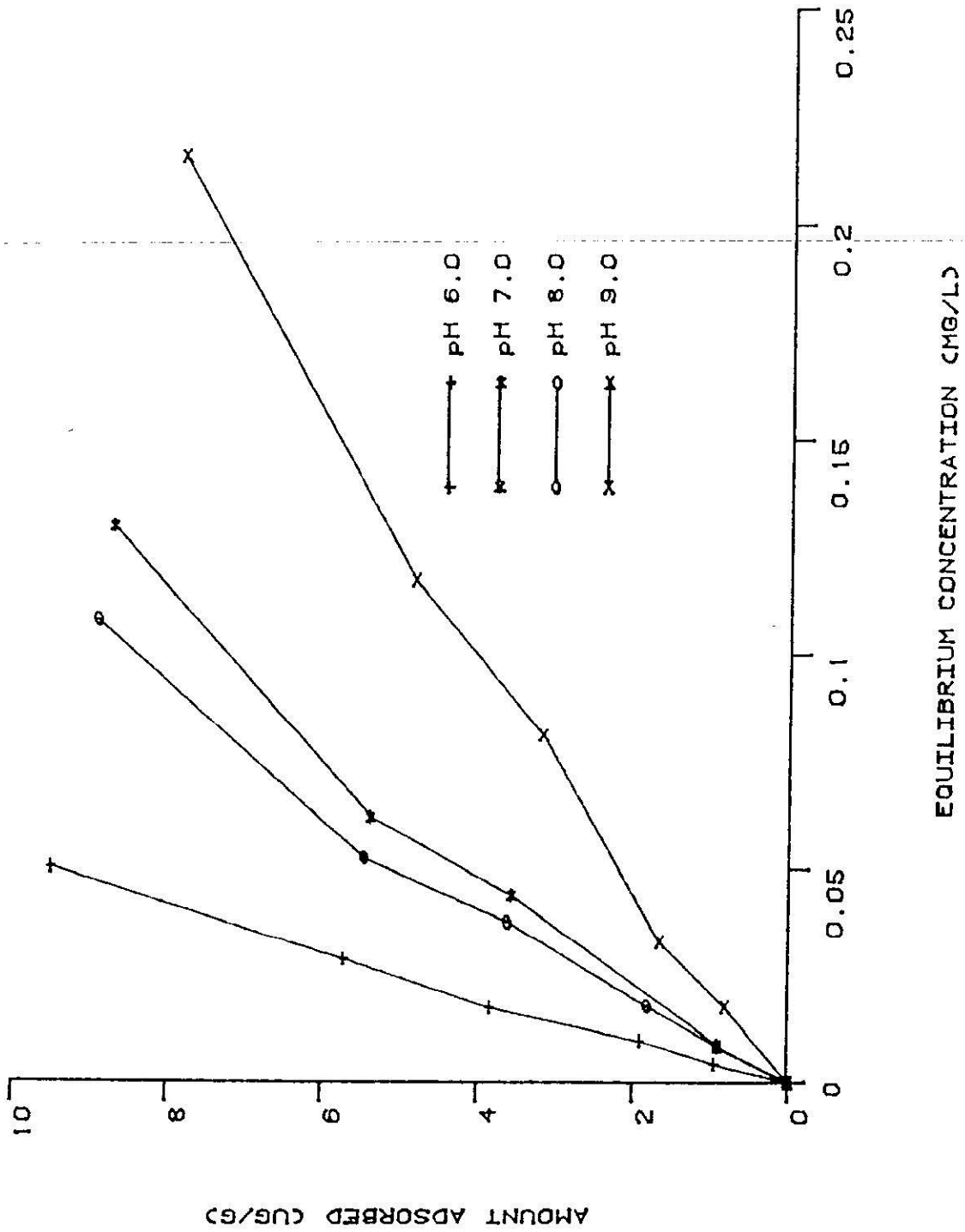


Figure 9. Adsorption equilibria for <sup>14</sup>C-rotenone by sediments from the Chocolay River, Michigan, at 20°C for four pH's.

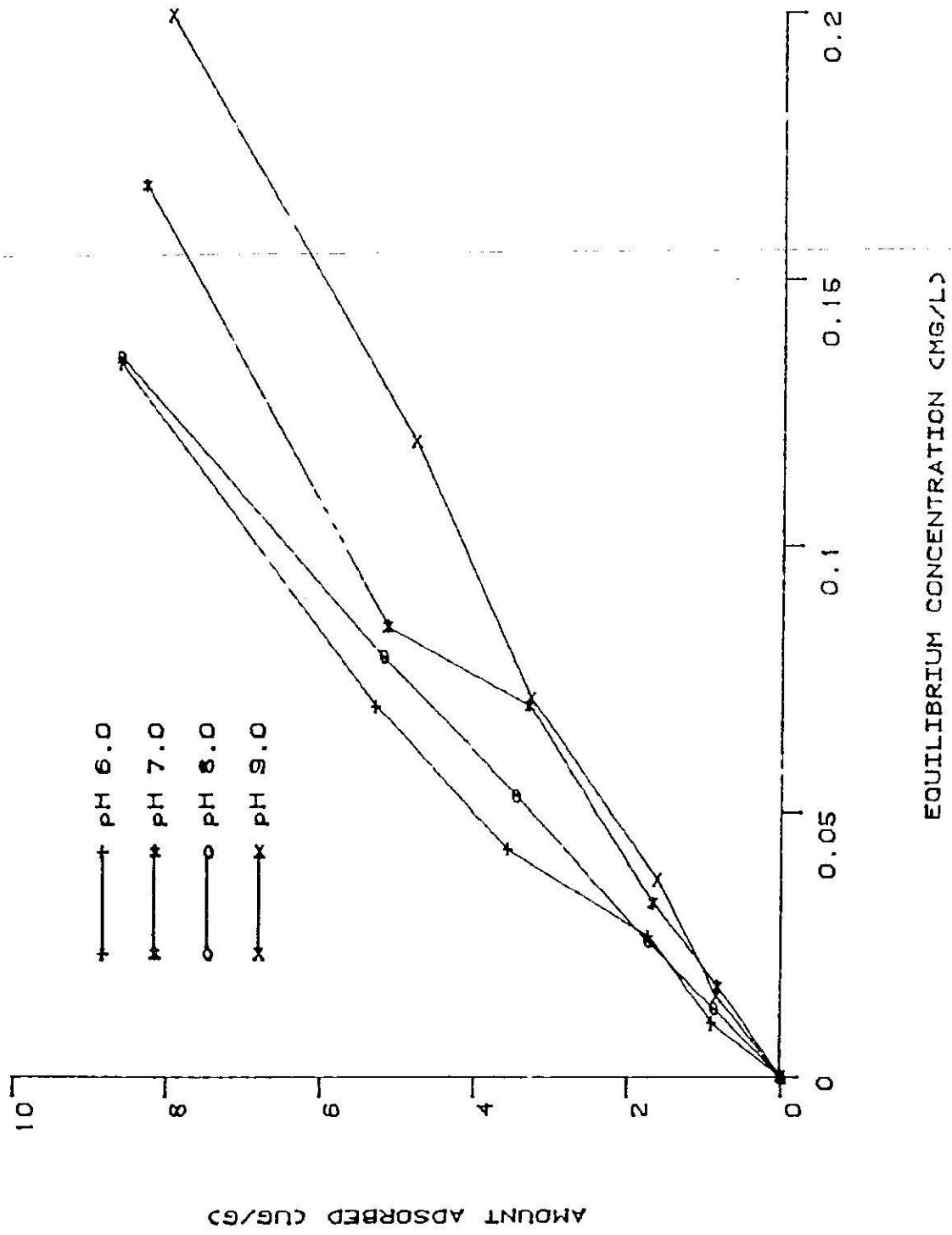


Figure 10. Adsorption equilibria for  $^{14}\text{C}$ -rotenone by sediments from the Ford River, Michigan, at  $5^\circ\text{C}$  and four pH's.



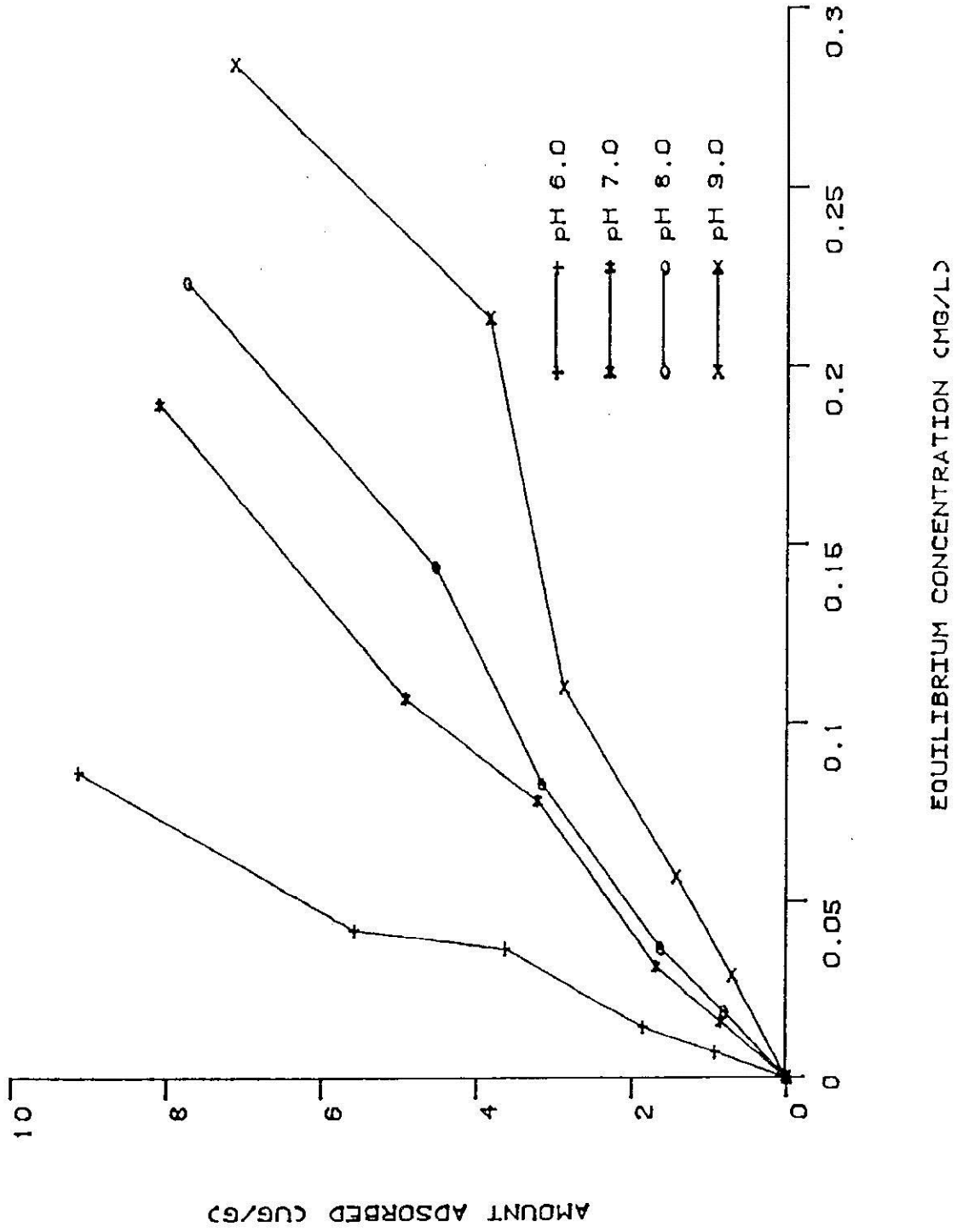


Figure 11. Adsorption equilibria for <sup>14</sup>C-rotenone by sediments from the Ford River, Michigan, at 20°C and four pH's.

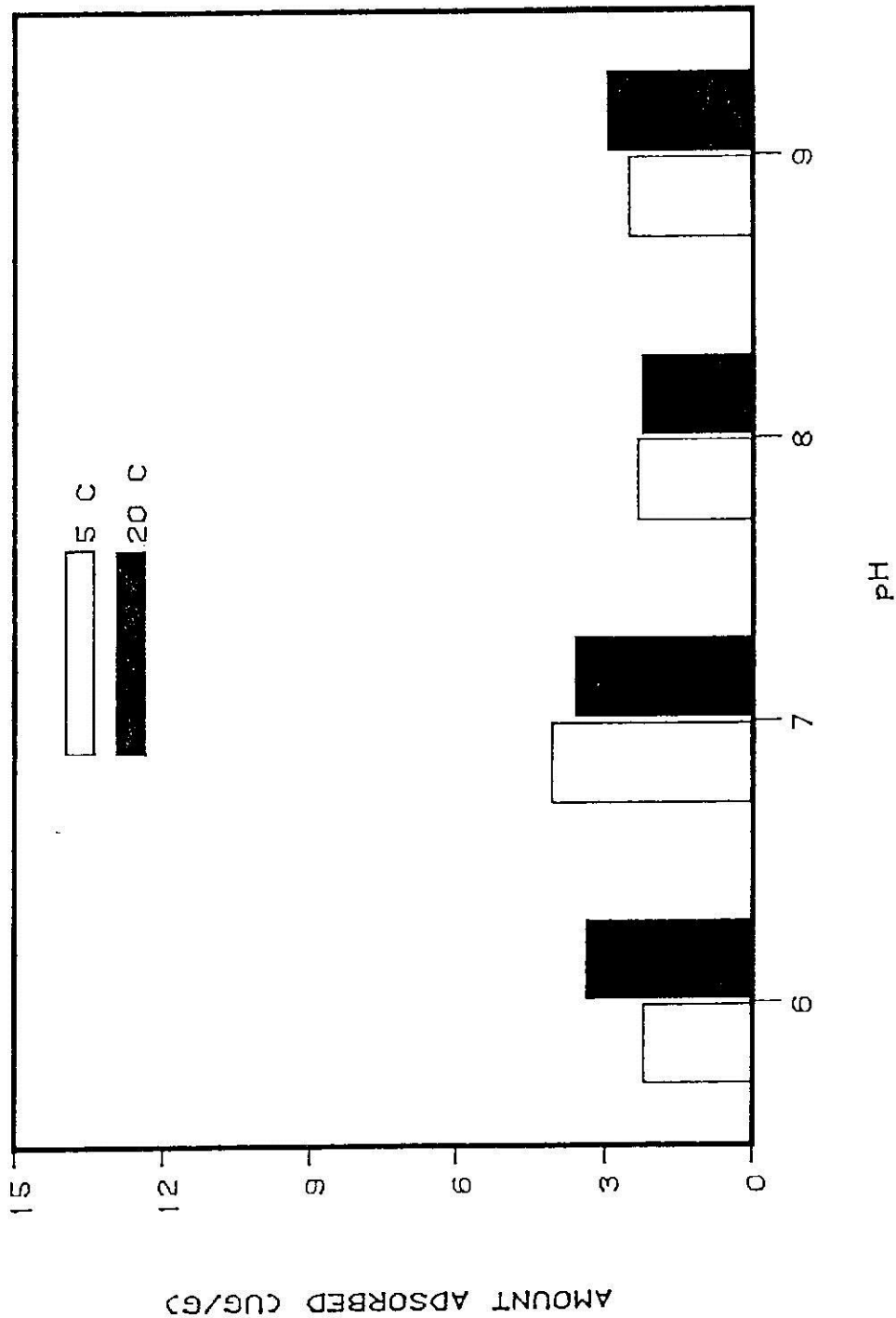


Figure 12. Adsorption of 1 mg/L solutions of <sup>14</sup>C-rotenone on Mississippi River main channel (River mile 707) sediments at selected temperatures and pH's.

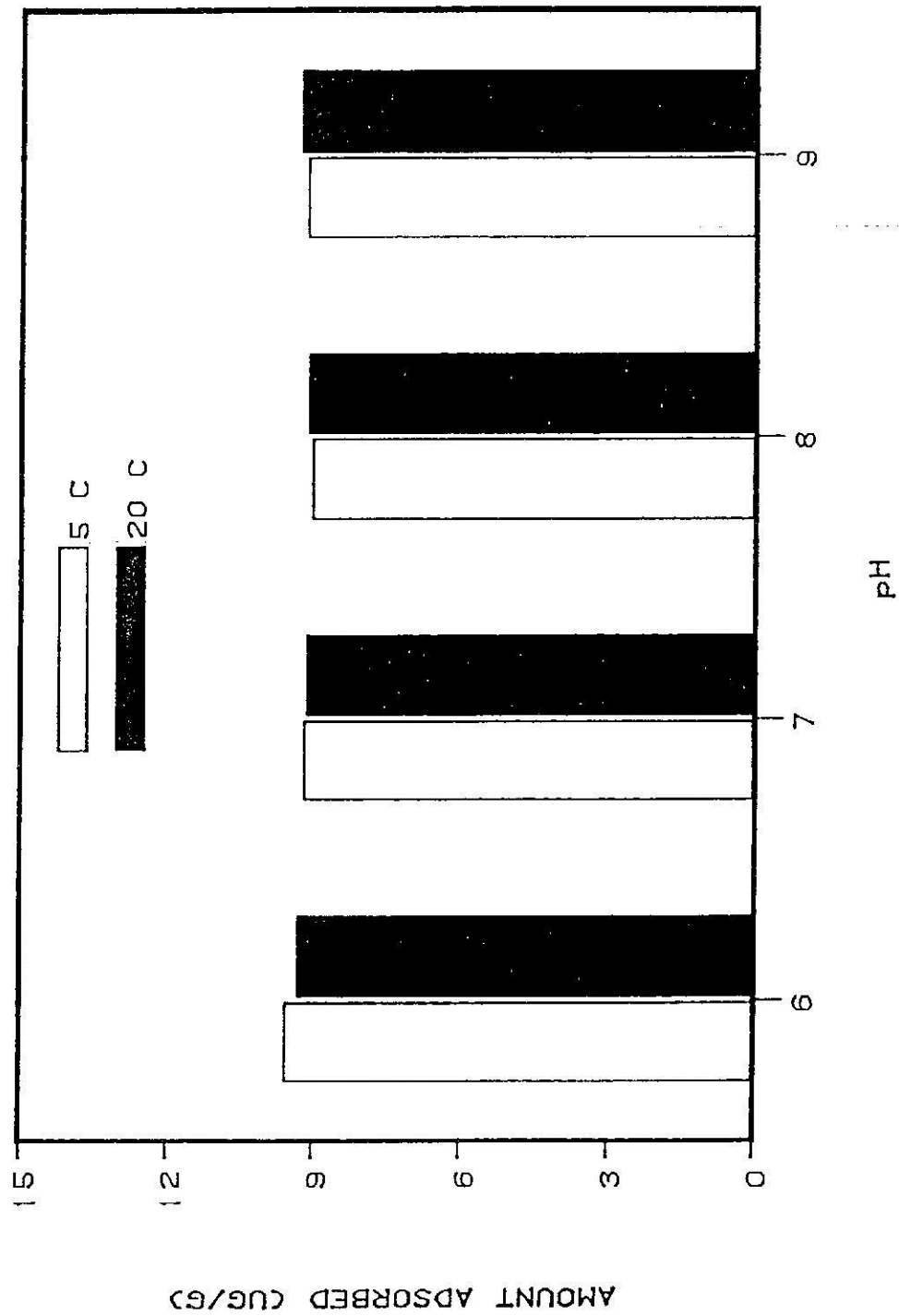


Figure 13. Adsorption of 1 mg/L solutions of <sup>14</sup>C-rotenone on Mississippi River backwater (River mile 704) sediments at selected temperatures and pH's.

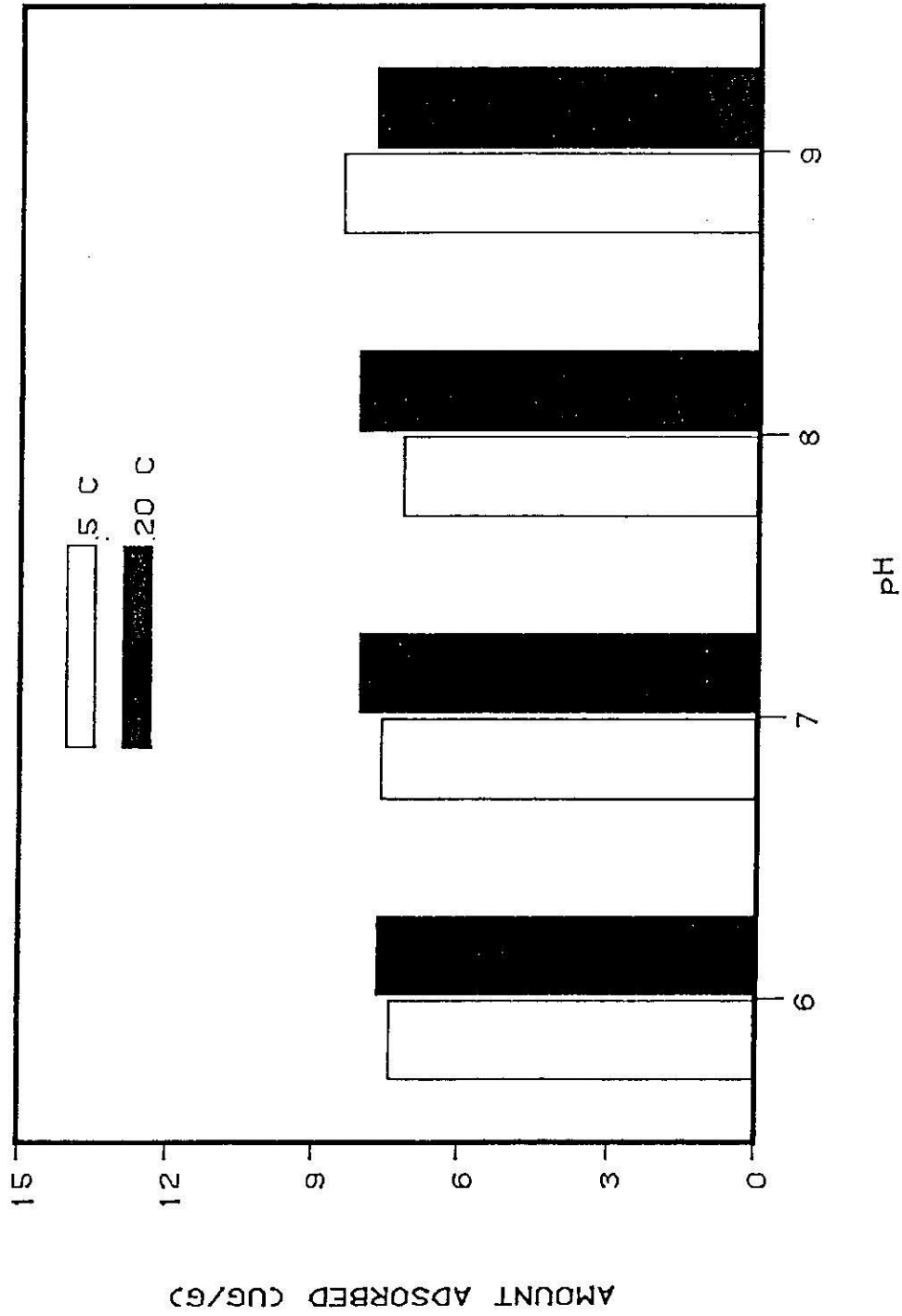


Figure 14. Adsorption of 1 mg/L solutions of <sup>14</sup>C-rotenone on Rice Branch Experiment Station, Arkansas, sediments at selected temperatures and pH's.



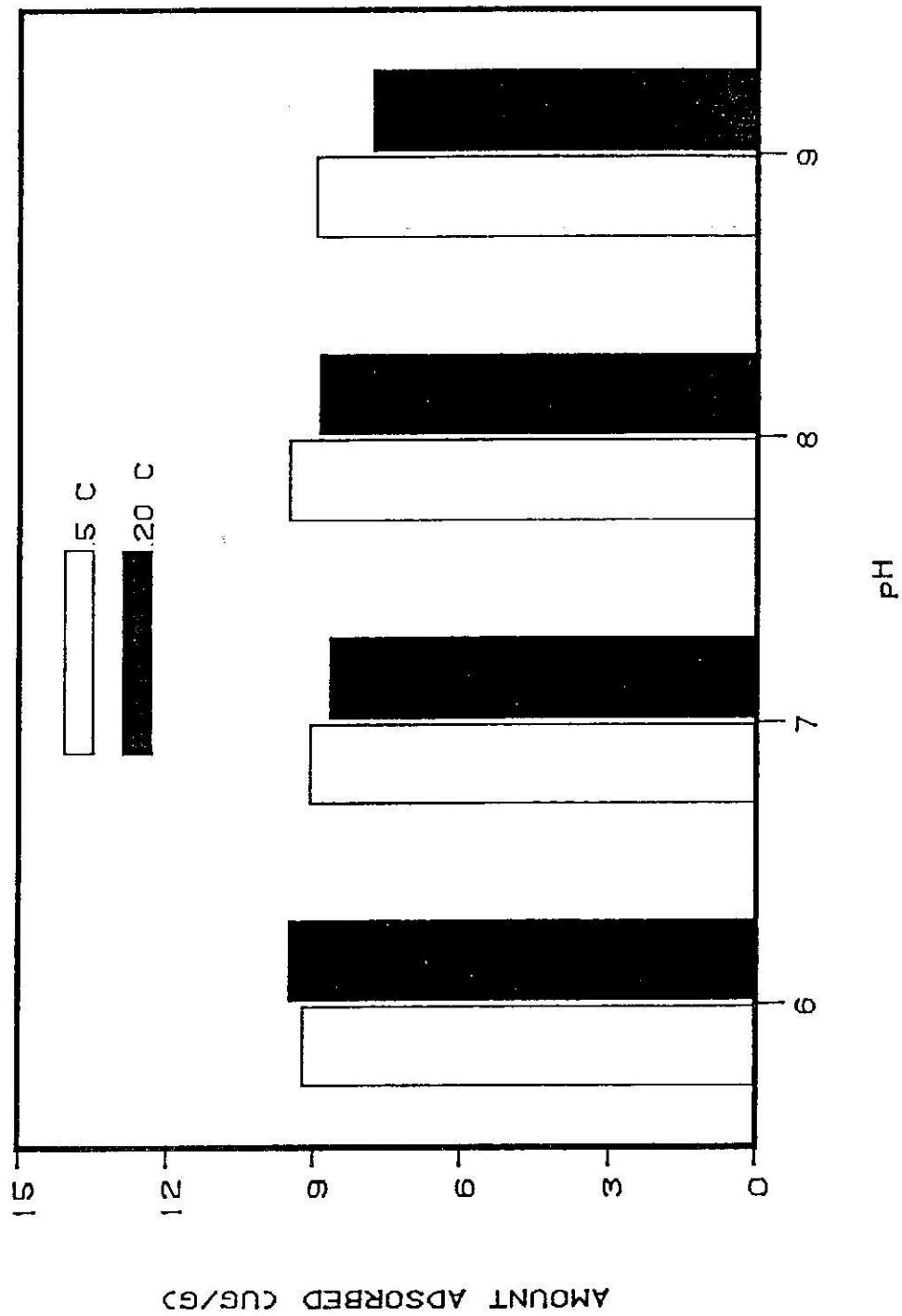


Figure 15. Adsorption of 1 mg/L solutions of <sup>14</sup>C-rotenone on Chocolay River, Michigan, sediments at selected temperatures and pH's.

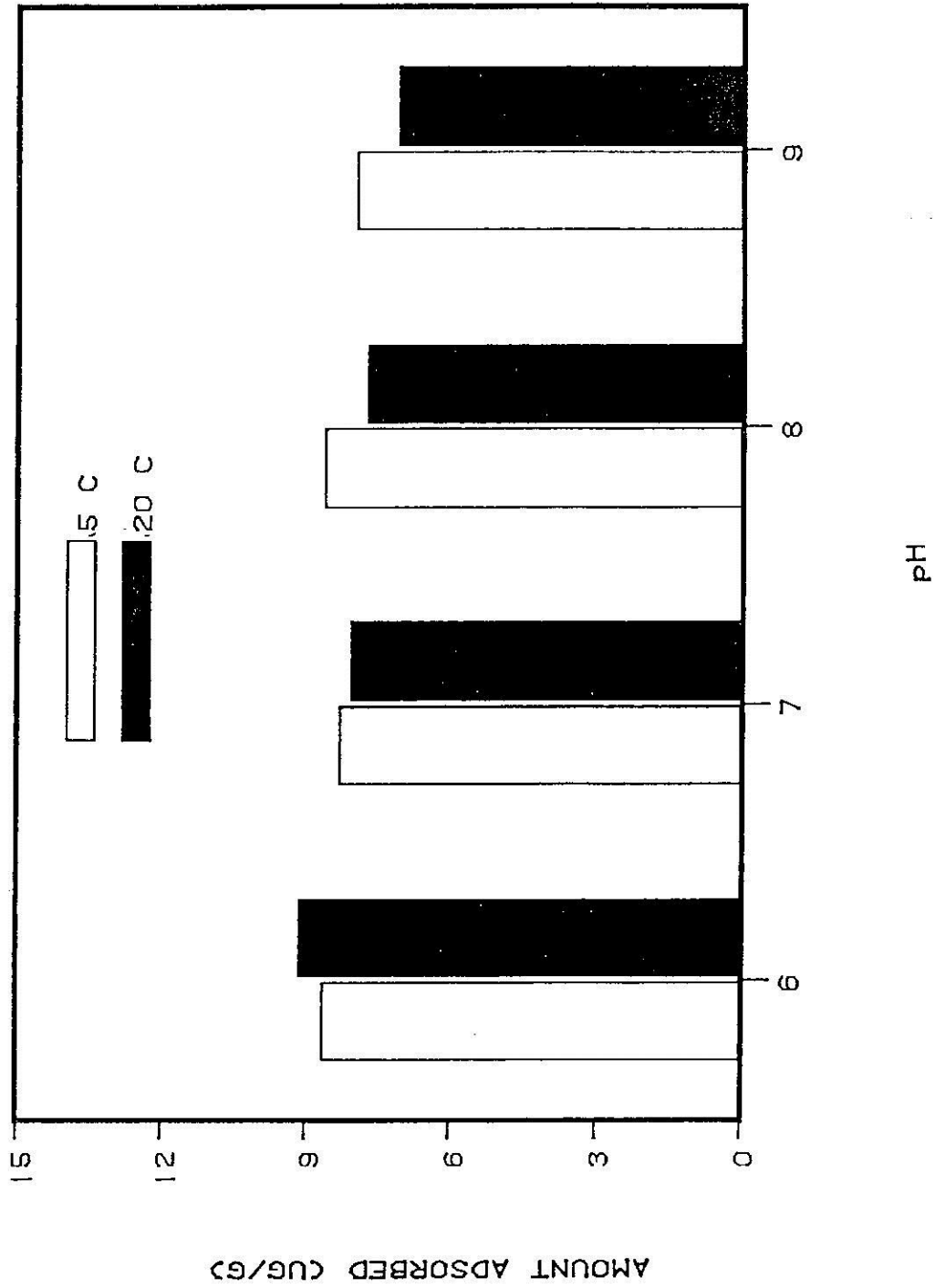


Figure 16. Adsorption of 1 mg/L solutions of <sup>14</sup>C-rotenone on Ford River, Michigan, sediments at selected temperatures and pH's.

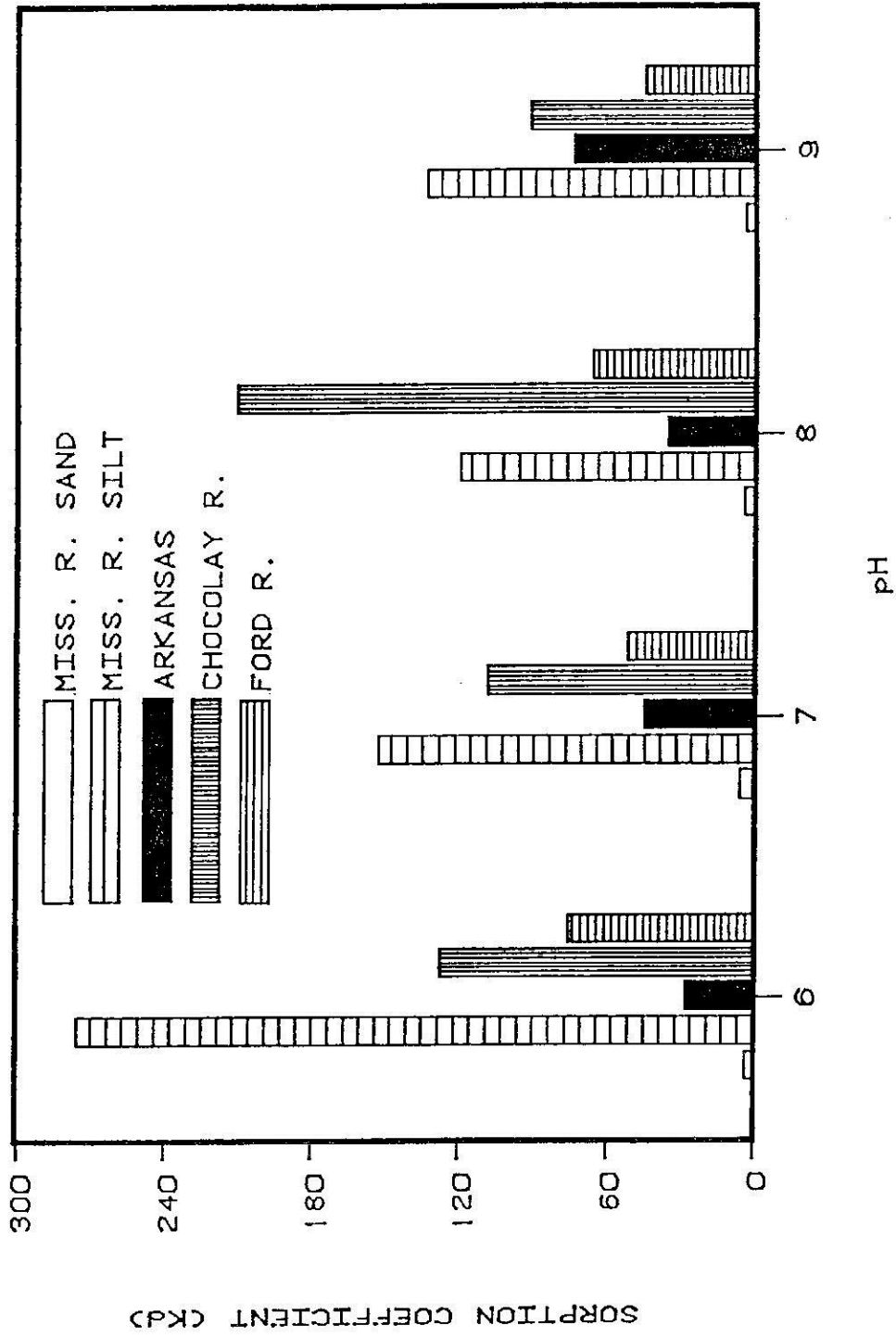


Figure 17. Sorption coefficients ( $K_d$ ) for  $^{14}\text{C}$ -rotenone by five different sediments at four pH's and  $5^\circ\text{C}$ .

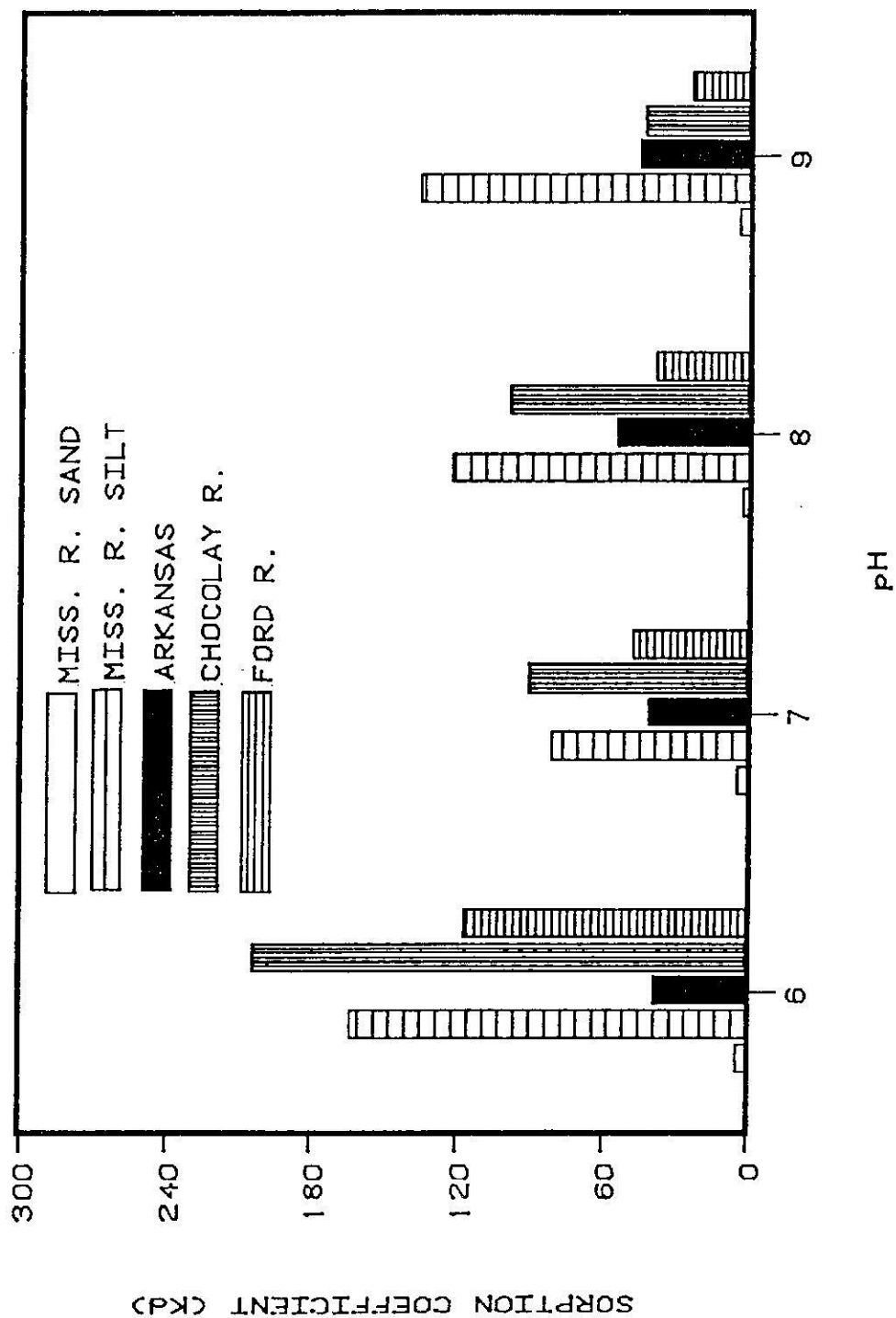


Figure 18. Sorption coefficients ( $K_d$ ) for  $^{14}C$ -rotenone by five different sediments at four pH's and 20°C.

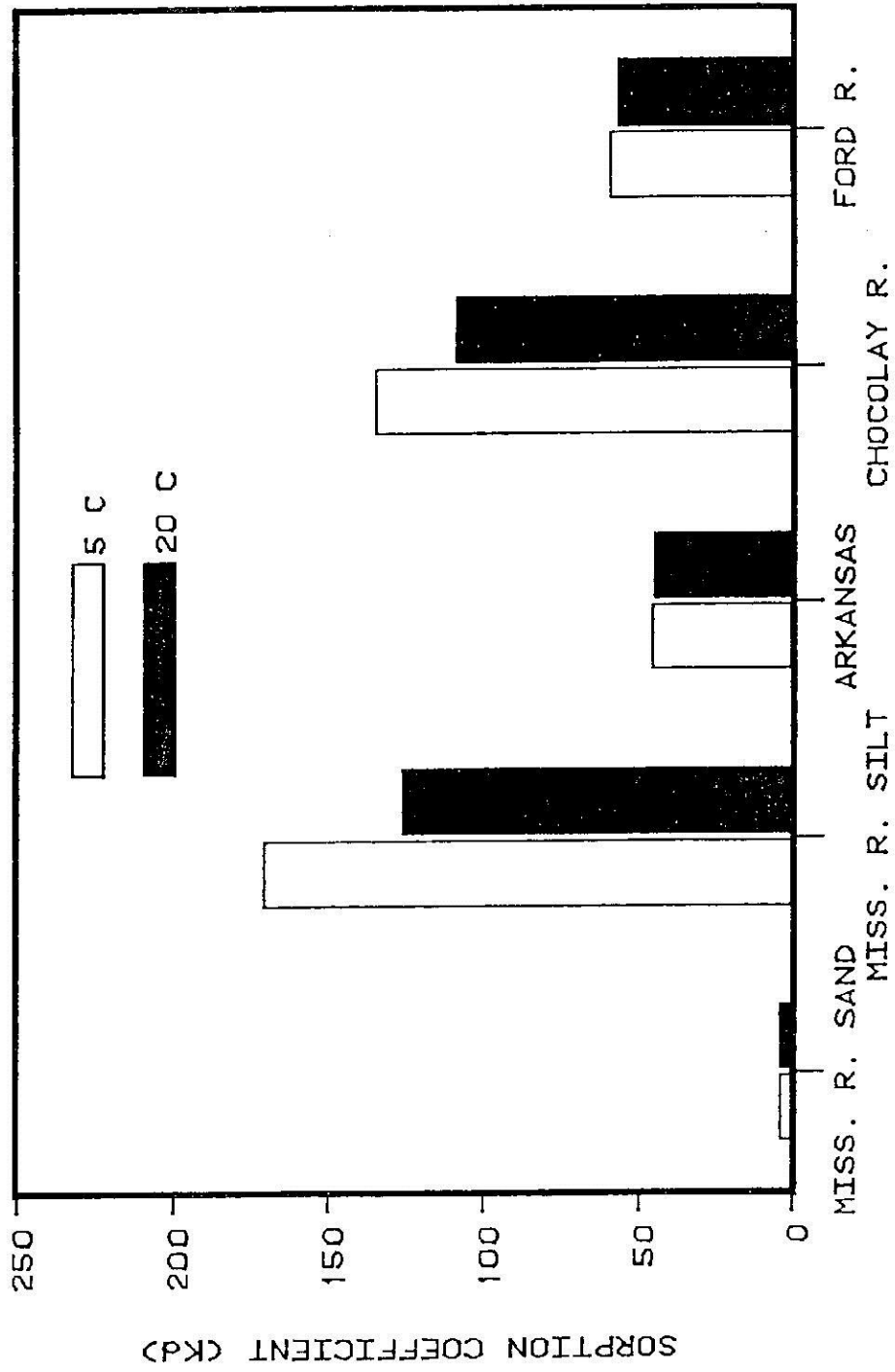


Figure 19. Sorption coefficients ( $K_d$ ) for  $^{14}\text{C}$ -rotenone on bottom sediments at two temperatures.



Figure 20. Desorption (%) of <sup>14</sup>C-rotenone from Mississippi River main channel (River mile 707) sediment at selected temperatures and pH's.

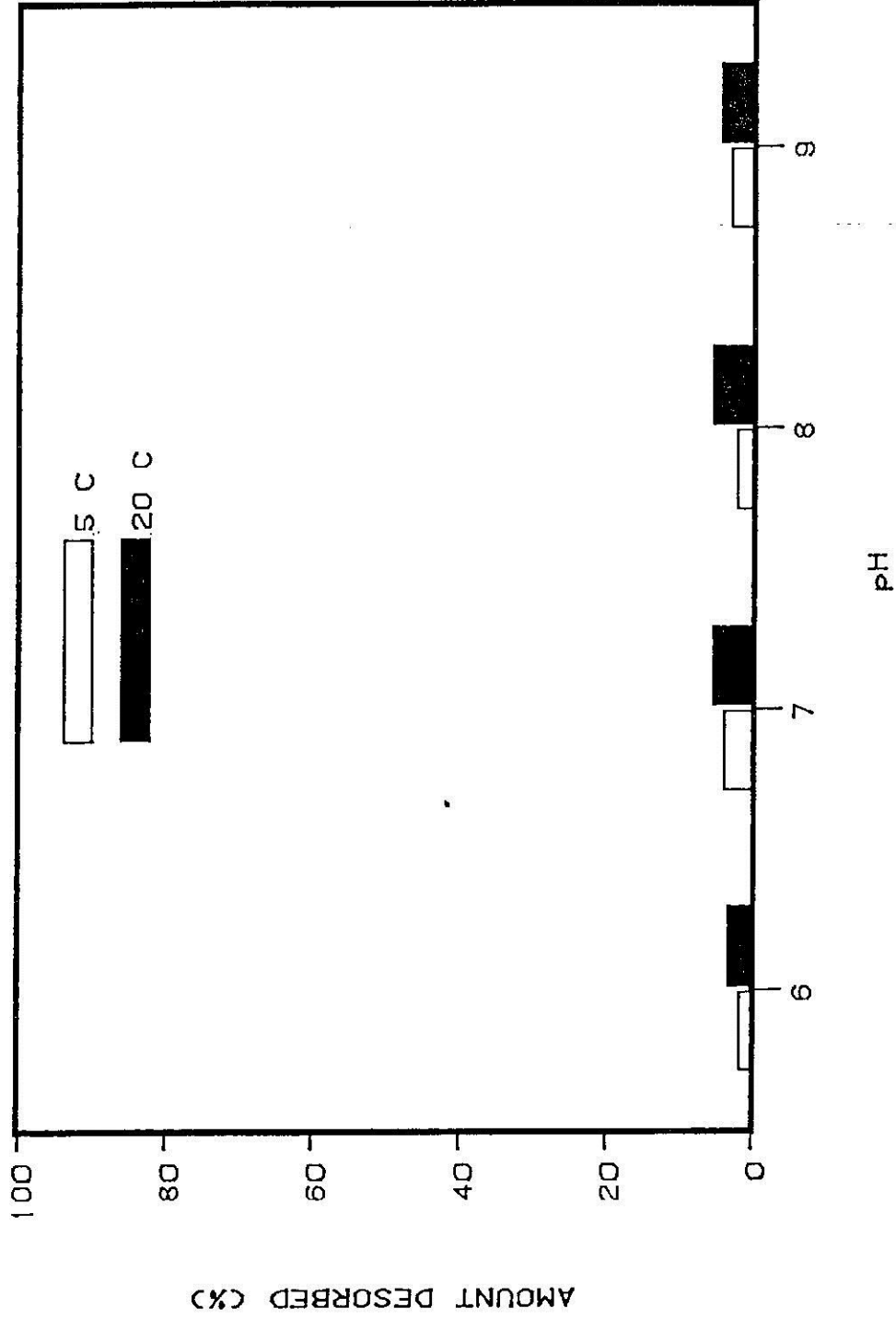


Figure 21. Desorption (%) of adsorbed  $^{14}\text{C}$ -rotenone from Mississippi River backwater (River mile 704) sediments at selected temperatures and pH's.

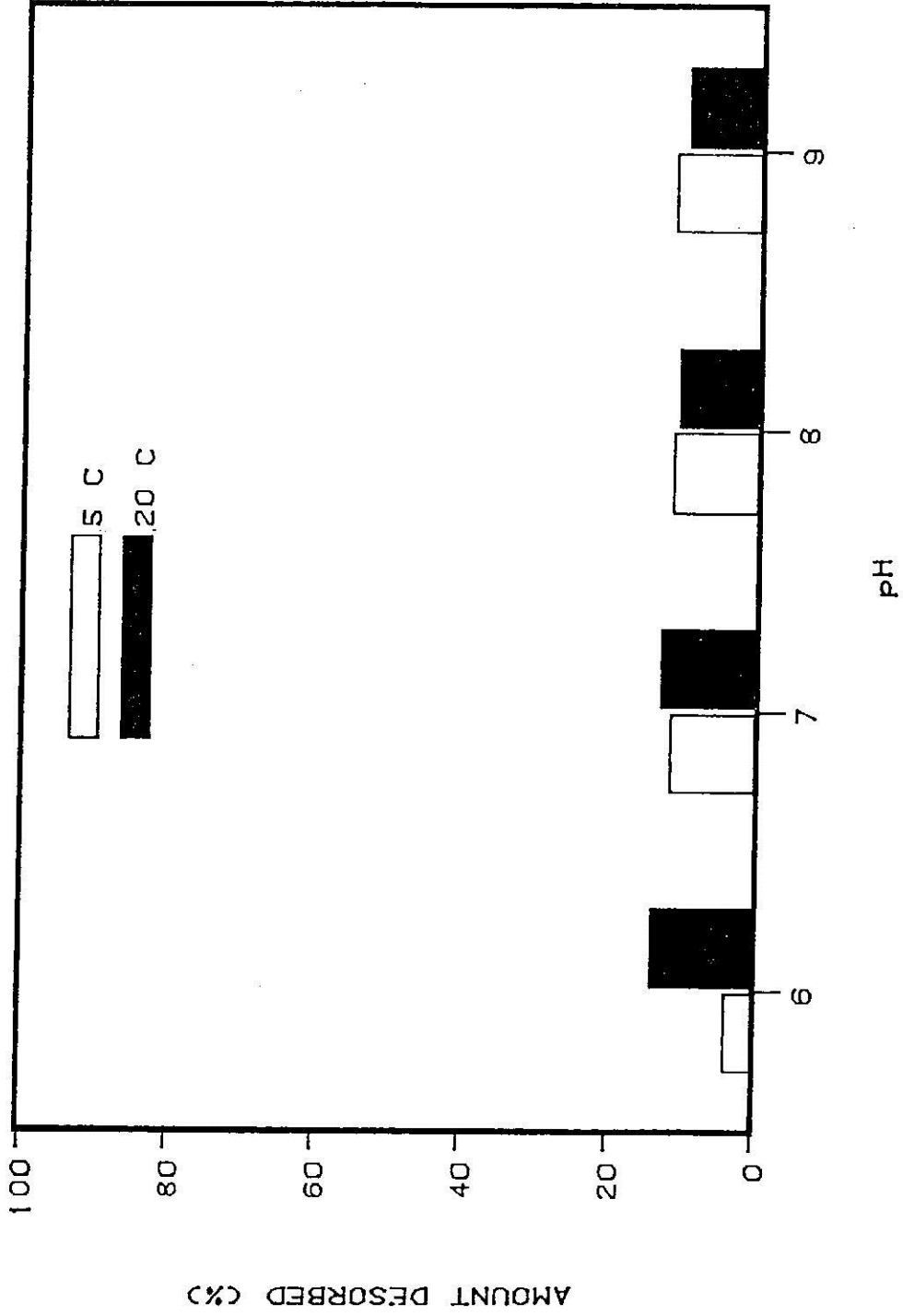


Figure 22. Desorption (%) of adsorbed <sup>14</sup>C-rotenone from Rice Branch Experiment Station, Arkansas, sediments at selected temperatures and pH's.



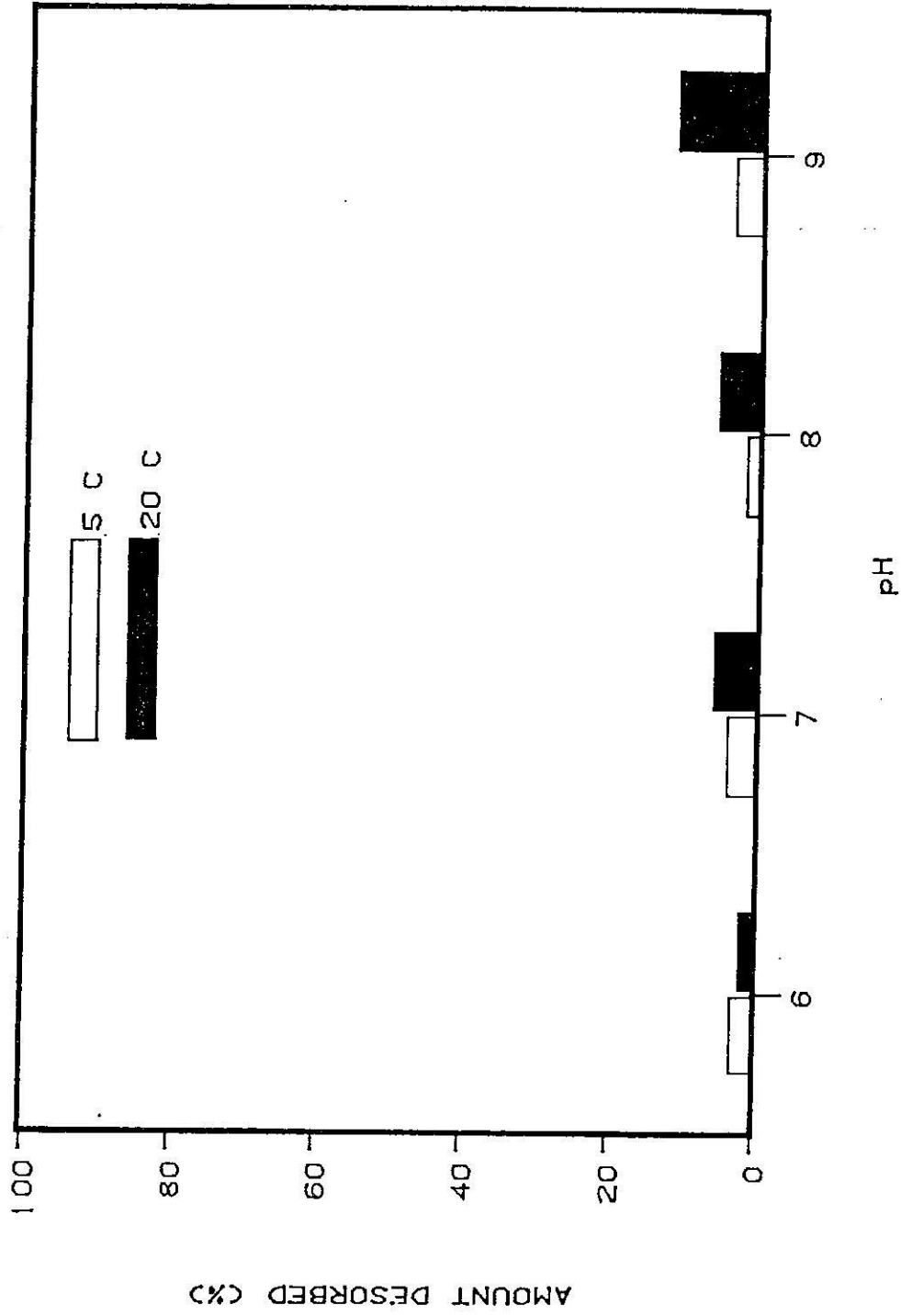


Figure 23. Desorption (%) of adsorbed <sup>14</sup>C-rotenone from Chocolay River, Michigan, sediments at selected temperatures and pH's.

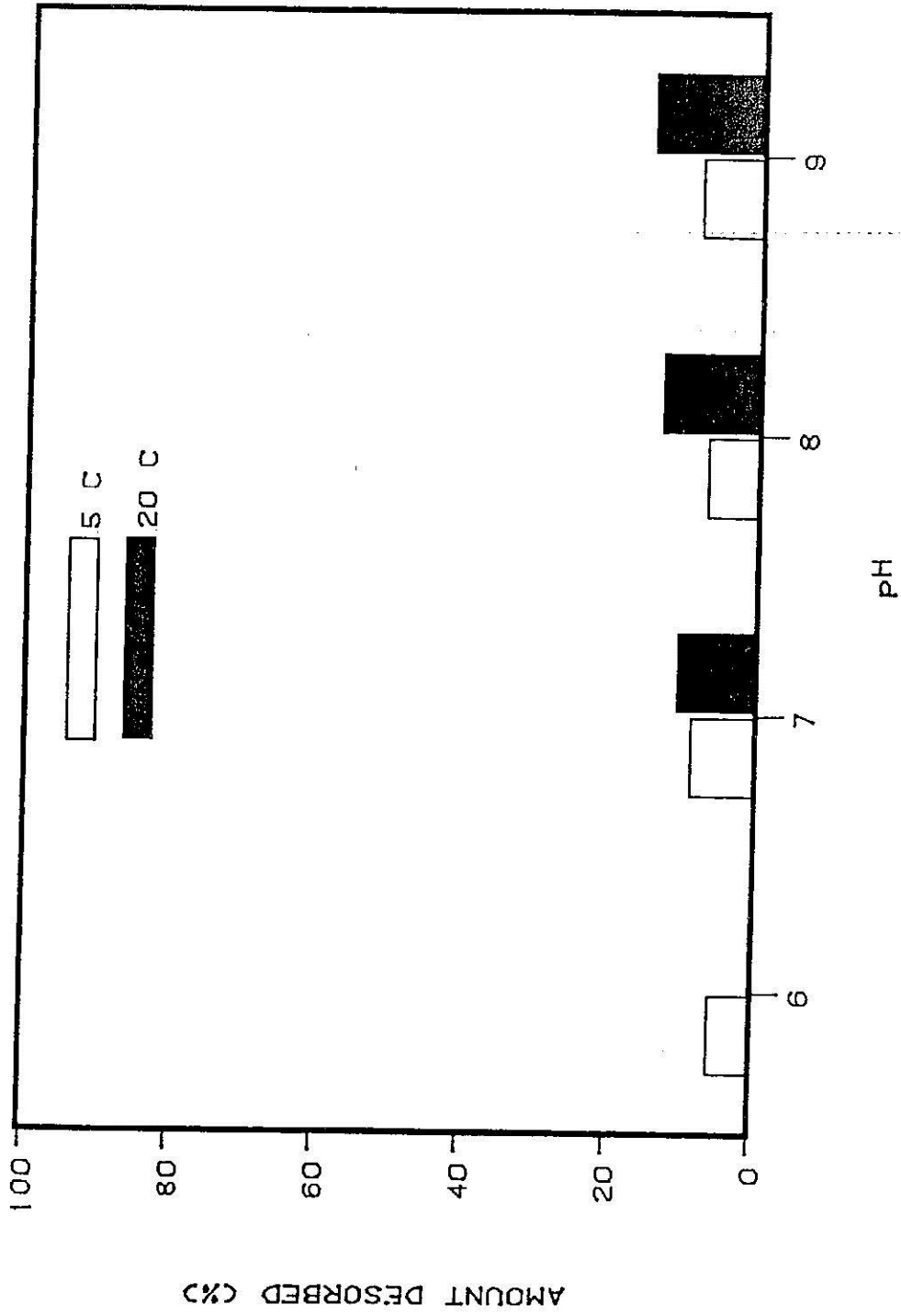


Figure 24. Desorption (%) of adsorbed <sup>14</sup>C-rotenone from Ford River, Michigan, sediments at selected temperatures and pH's.