

Summary of *Edwardsiella tarda* and G30 Biogroup Isolates – 1988-1993

(table compiled April 2, 1994)

	"Majority Type"		"CL Biogroup" ¹	Biogroup 1	G30 Biogroup ²
	typical	arabinose +			
representative isolate ³	F53 (8P42)	F105 (8P50)	F67 (8P45)	F63 (8P44)	G30 (8P48)
strain no. at CDC	-----	-----	372-89	440-88	2404-94
isolation frequency	hundreds	occasional	occasional	one isolate	31 isolates
nitrate reduced to nitrite	+	+	+	+	–
phenylalanine deaminase	–	–	–	–	(+)
lysine decarboxylase	+	+	+	+	+
arginine dihydrolase	–	–	–	–	+
ornithine decarboxylase	+	+	+	+	– [late +]
indole from tryptophan	+	+	+	+	–
Voges-Proskauer & Simmons Citrate	–	–	–	–	–
glucose fermentation	+	+	+	+	+
gas from glucose	+	+	+	–	–
lactose & xylose fermentation	–	–	–	–	–
sucrose & mannitol fermentation	–	–	–	+	–
arabinose fermentation	–	+	–	+	–
ET Agar – pH	alkaline	alkaline	alkaline	very acidic	sl. acidic to alkaline
ET Agar – H ₂ S	+	+	+	+	+
KIA – H ₂ S	+	+	(+)	(+)	(+)
TSI & TSIM– H ₂ S	+	+	(+)	–	(+)
API-20E – H ₂ S	+	+	–	+	–
API-20E – profile no.	4544000	4544002	4144000	4544122	6004000

¹ Distinguished by **consistently small colonies on ET Agar** with colistin. Relatively slow growth. Cultures of this biogroup have been known to last well over a year on Nutrient Agar slants in the refrigerator and then finally show growth upon new transfer after a week. Tests to differentiate by phage-typing have yet to be retried.

² The characteristic **combination of arginine-positive and mannitol-negative reactions** for all isolates in this group appears rarely among members of the Family *Enterobacteriaceae* and **may be considered highly diagnostic**. Established at CDC as **Enteric Group 121**. GenBank has the 16S rRNA sequence for strain 2404-94 on the web: Go to <https://www.ncbi.nlm.nih.gov/pubmed> and choose Nucleotide in the drop-down menu; search for **AF015258**.

³ First number is isolate designation, and the number in parentheses is the strain designation in the UW-Madison Department of Bacteriology stock culture collection. 8P42 and 8P50 are no longer extant.