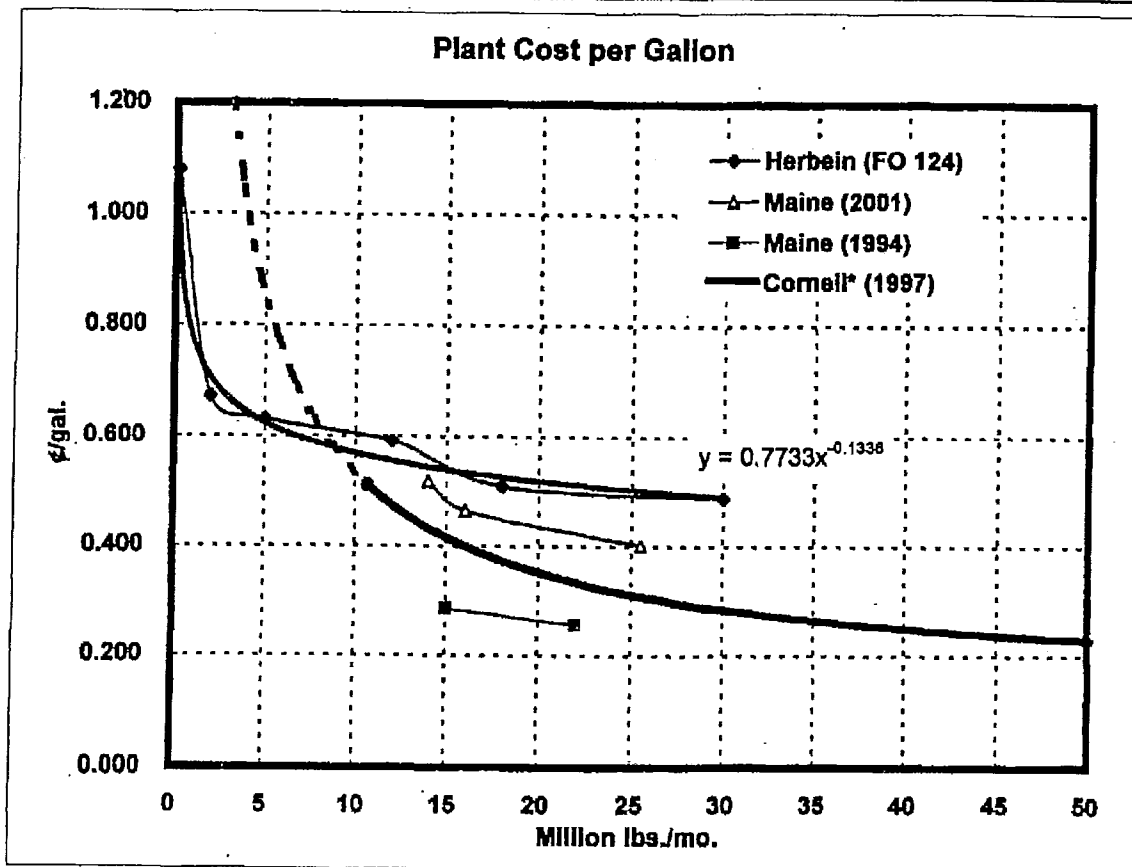


NMPF: Table 1
Processing Costs of Fluid Milk Plants by Size
September 23, 2003

Monthly Volume (mil. lbs.)	0.09	2.0	5.0	12.0	18.0	30.0
Herbein (FO 124)	1.080	0.671	0.631	0.591	0.509	0.488
Monthly Volume (mil. lbs.)		13.3	20.5	27.7	39.6	51.4
Cornell* (1997)		0.447	0.349	0.299	0.253	0.227
Monthly Volume (mil. lbs.)				14.0	16.0	25.5
Maine (2001)				0.518	0.465	0.402
Monthly Volume (mil. lbs.)				15.0	22.0	
Maine (1994)				0.289	0.257	



NMPF: Table 1A
Calculating Plant Cost Equation from Cornell results
September 23, 2003

Elasticity of plant costs/gal. with respect to plant volume, direct & indirect: -0.81

Within range of study

Plant volume, mil. gal./mo.	13.3	20.5	27.7	39.55	51.4
Plant costs, \$/gal.	0.330	0.232	0.182	0.136	0.110
Cost of producing gallon jug	0.088	0.088	0.088	0.088	0.088
Plant dep., \$/gal.	0.029	0.029	0.029	0.029	0.029
Total plant costs, \$/gal.	0.447	0.349	0.299	0.253	0.227

The mean "plant cost" per gallon in the study (18.2¢) was assigned to the mean plant size in the study (27.7 million lbs./mo.). Plant costs were then estimated using the study's elasticity of plant cost per gal. with respect to plant volume.

Packaging and depreciation costs are taken as constant.

Cornell equation for "plant costs":

$$\ln \text{COST} = B_0 + B_1 \ln \text{GAL} + \dots$$

Equals:

$$\text{COST} = (e^{B_0}) * (\text{GAL}^{B_1})$$

One point is:

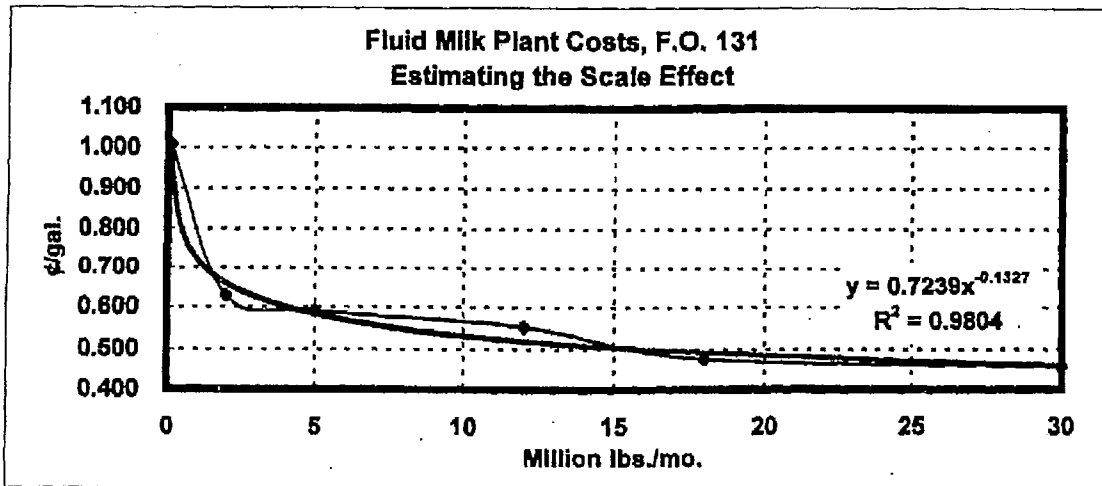
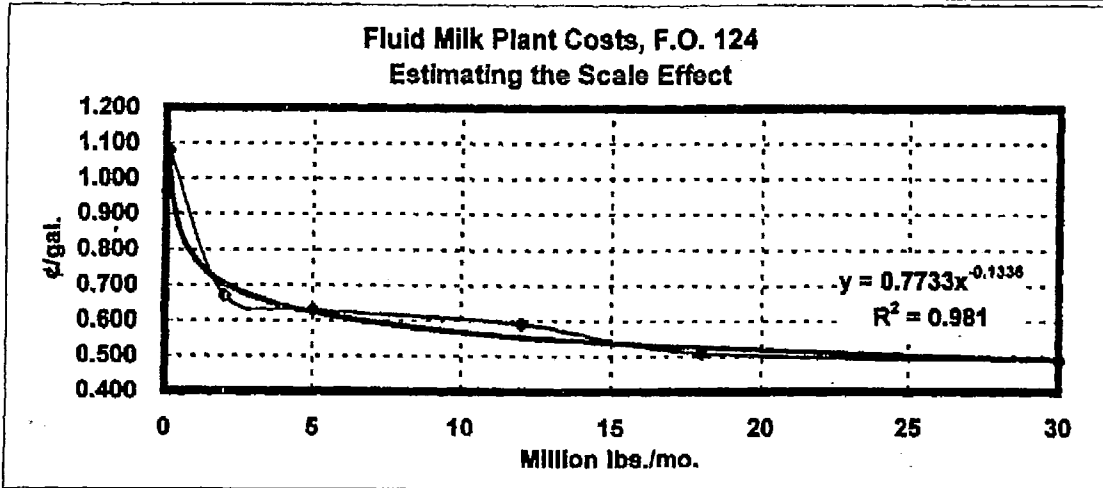
$$0.182 = 2.682131 * 27.7^{(-0.81)}$$

$$eB = 2.682131$$

$$B = 0.986612$$

NMPF: Table 1B
Calculating Plant Cost Equation from Herbein Survey
September 23, 2003

Monthly Volume (mil. lbs.)	0.09	2.0	5.0	12.0	18.0	30.0
Herbein (FO 124)	1.080	0.671	0.631	0.591	0.509	0.488
Monthly Volume (mil. lbs.)	0.09	2.0	5.0	12.0	18.0	30.0
Herbein (FO 131)	1.008	0.629	0.592	0.555	0.477	0.458



Estimated Costs of Average Distributing Plants

	Mil. lbs.			
Avg. pool dist. plants	/mo., avg.	Comell	Herbein (fitted)	
AZ-LV	26.7	0.305	0.466	$=0.7553*(\text{plant size}^{-0.1467})$
Pac NW	9.7	0.543	0.535	$=0.7239*(\text{plant size}^{-0.1327})$

NMPF: Table 3
Cost Advantage of Producer-Handlers of Various Sizes
Relative to Average Pool Distributing Plant
Pacific Northwest Market
September 23, 2003

Herbein						
<i>Producer Handler</i>						
Monthly Volume (mil. lbs.)	0.09	2.0	5.0	12.0	18.0	30.0
Plant cost	1.080	0.671	0.631	0.591	0.509	0.488
Price advantage (Class I - blend)	0.143	0.143	0.143	0.143	0.143	0.143
Plant cost - price advantage	0.937	0.528	0.488	0.448	0.366	0.345
<i>Average Pool Distributing Plant</i>						
Monthly Volume (mil. lbs.)	9.7	9.7	9.7	9.7	9.7	9.7
Plant cost (26.7 mil. lbs./mo.)	0.534	0.534	0.534	0.534	0.534	0.534
Producer Handler advantage	(0.403)	0.006	0.046	0.086	0.168	0.189
Without price difference	(0.546)	(0.137)	(0.097)	(0.057)	0.025	0.046

