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COMMENTS ON "SLOSHING IN SHALLOW CYLINDRICAL TANKS"

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I am writing this comment concerning the interesting paper of Professor Gupta [1] to correct a minor mistake. In fact the roots of the following equation

$$J'_m(\bar{k}_{mj}) = 0 \quad \text{for} \quad m = 0, 1, 2, 3, \ldots \quad \text{and} \quad j = 1, 2, 3, \ldots \tag{1}$$

that are reported in equation (11) of reference [1] are not correct, except for the first row ($m = 0$). The correct values, computed by the present writer, are reported in Table 1. They can be satisfactorily compared to those reported in reference [2]. In particular, also the zero root for $m = 0$ is reported for completeness.

Table 1

Roots of equation (1)

	j						
m	1	2	3	4	5	6	7
0	0	3·8317	7·0156	10·1735	13·3237	16·4706	19·6159
1	1·8412	5·3314	8·5363	11·7060	14·8636	18·0155	21·1644
2	3·0542	6·7061	9·9695	13·1704	16·3475	19·5129	22·6716
3	4·2012	8·0152	11·3459	14·5859	17·7888	20·9725	24·1449
4	5·3176	9·2824	12·6819	15·9641	19·1960	22·4010	25·5898
5	6·4156	10·5199	13·9872	17·3128	20·5755	23·8036	27·0103
6	7·5013	11·7349	15·2682	18·6374	21·9317	25·1839	28·4098

REFERENCES

1. R. K. Gupta 1995 *Journal of Sound and Vibration* **180**, 397–415. Sloshing in shallow cylindrical tanks.
2. H. N. Abramson (Editor) 1996 *The Dynamic Behavior of Liquids in Moving Containers*, NASA SP-106. Washington, DC: Government Printing Office. (See Table 2.2 at p. 31).

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