Appendix A. Supplementary Material A - Posterior Probability Sampling Distribution

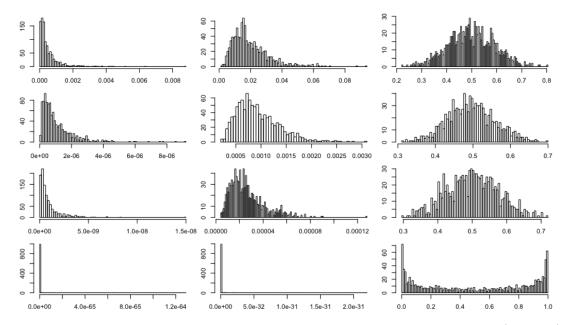


Figure A1. The empirical sampling distribution of posterior probabilities for three test points (k = 3, 5, 7) based on 1,000 datasets each with $n_1 = n_2 = 1,000$. From left to right are the empirical sampling distribution for $z_{3,2}$, $z_{5,2}$, and $z_{7,2}$. From top to bottom, the rows are d = 2, 3, 4, 14, which is the distance between cluster means.

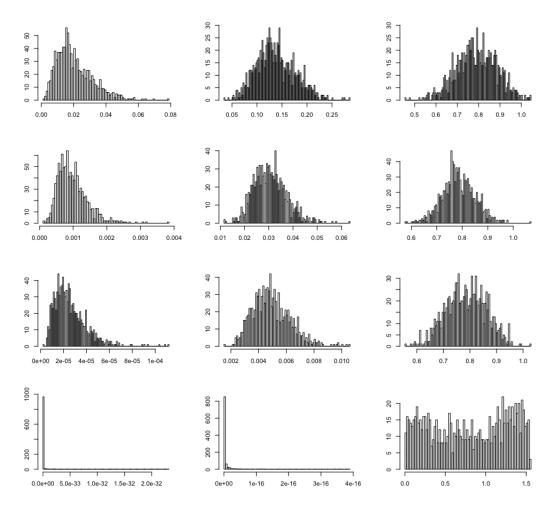


Figure A2. The empirical sampling distribution of square arcsin tranformed posterior probabilities for three test points (k = 3, 5, 7) based on 1,000 datasets each with $n_1 = n_2 = 1,000$. From left to right are the empirical sampling distribution for arcsin $(\sqrt{z_{3,2}})$, arcsin $(\sqrt{z_{5,2}})$, and arcsin $(\sqrt{z_{7,2}})$. From top to bottom, the rows are d = 2, 3, 4, 14, which is the distance between cluster means.