



Supplementary Figure 3 Eleven gene clusters, designated cluster I-XI, may be involved in pili synthesis. Cluster I contains genes (*mrfl* - *mrfJ*) similar to mannose-resistant (MR/P) fimbrial genes of *Proteus mirabilis*¹. Clusters II and III resemble each other and are found downstream of cluster I. Cluster IV, similar to clusters II and III, is probably not functional. Cluster V is similar to cluster I. Two additional genes of unknown function (*plu0412*, *plu0411*) may belong to cluster V, and form a putative operon. Between the two pairs of adjacent genes of clusters I and V (*mrfA* and *mrfl*, *plu0419* and *plu0418*), a 21 bp inverted repeat is present that is highly similar to an inverted repeat identified in a fimbrial gene cluster of *Proteus mirabilis*¹. Both are separated by about 270 bp. This element could be a target of the Mrfl recombinase allowing regulation of fimbrial expression, as observed in other organisms. Cluster VIII is similar to the cluster described by Waterfield². Cluster X probably encodes type IV pili similar to those of pathogenic *E. coli*³ and *Salmonella enterica*⁴. The GC content of these genes as well as their flanking genes are higher than average, suggesting horizontal transfer. Cluster XI shows some similarities to cluster X. The genes are colour coded to indicate related genes.

References

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