

Abstract

Recently, researchers have explored the use of iteration processes from fixed point theory for the generation of complex fractals. Examples include the Mann, the Ishikawa, the Noor, the Jungck-Mann and the Jungck-Ishikawa iterations. A generalisation of M., J. and multicorn sets using Jungck-Mann, Jungck-Ishikawa, Jungck-Noor, Jungck-Picard implicit iterations is presented here. This approach does not reduce to any of the previous results used to study complex fractals. The following polynomial exhibits a new escape criterion $f(z) = \cos(z^m) + h$, $h \in C$, and to present graphical examples of the complex fractals obtained.