

**Author(s):** Aleixo, SM (Aleixo, Sandra M.); Rocha, JL (Rocha, J. Leonel); Pestana, DD (Pestana, Dinis D.)

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**Abstract:** We present new populational growth models, generalized logistic models which are proportional to beta densities with shape parameters  $p$  and  $2$ , where  $p > 1$ , with Malthusian parameter  $r$ . The complex dynamical behaviour of these models is investigated in the parameter space  $(r, p)$ , in terms of topological entropy, using explicit methods, when the Malthusian parameter  $r$  increases. This parameter space is split into different regions, according to the chaotic behaviour of the models.

**Addresses:** [Aleixo, Sandra M.] Inst Super Engn Lisboa, Math Unit, DEC, P-1949014 Lisbon, Portugal

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