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The notion of isotopy was introduced in the context of genetic algebras more than twenty years ago [Holgate, Proc. Edinburgh Math. Soc. (2) **15** (1966), 1–9; MR0201199 (34 #1083)]. In the present paper, this is shown to be a useful concept in several general classes of algebras. In particular, it is demonstrated that all algebras for polyploidy and chromosome segregation, corresponding to different sets of mutation rates, are principal isotopes. Algebras reflecting varying degrees of double reduction are special isotopes, as are recombination algebras with unequal recombination values. Moreover, the various powers of the nilideal are the same for all algebras within each such class. In a certain sense these results imply that it is sufficient to deal with one basic member only of each class of algebras when studying problems related to the quadratic nature of the evolutionary operator. The general solution can then be found by applying simple linear transformations to the population elements considered in each generation.   *Ivar Heuch*