

**MR1338189 (96e:17074) 17D92**

**Mallol, C.** (F-MONT3-MA); **Varro, R.** (F-MONT3-MA)

**Les algèbres de mutation.** (French. English summary) [Mutation algebras]

*Non-associative algebra and its applications (Oviedo, 1993)*, 245–250, *Math. Appl.*, 303, Kluwer Acad. Publ., Dordrecht, 1994.

For a vector space  $A$  over a field  $K$  of characteristic different from 2, this paper considers the  $\omega M$ -algebras, whose definition is introduced by the authors from nontrivial linear mappings  $\omega: A \rightarrow K$  and  $M: A \rightarrow A$  such that the product in  $A$  is given by  $xy = \frac{1}{2}(\omega(y)M(x) + \omega(x)M(y))$ . In these algebras it is proved that  $\omega$  is an algebra homomorphism, usually called the weight homomorphism, if and only if  $\omega \circ M = \omega$ . This result permits one to characterize the mutation algebras, which are a generalization of the algebras for mutation arising in genetic models. The authors also obtain results about the existence of idempotent elements, endomorphisms and derivations in these mutation algebras.

{For the entire collection see [MR1338148 \(96a:17001\)](#)}

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