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Let K be a field of characteristic $\neq 2$, A a commutative K-algebra and $\omega\colon A \to K$ a nonzero homomorphism. The ordered pair (A, ω) is called a baric algebra. If there exist $\gamma_1, \dots, \gamma_{n-1}$ in K such that $x^n + \gamma_1\omega(x)x^{n-1} + \cdots + \gamma_{n-1}\omega(x)^{n-1}x = 0$, for all $x \in A$, we say that (A, ω) is a commutative train algebra.

A commutative algebra A over a field K of characteristic $\neq 2$ is a mutation algebra if it has a nonzero linear form $\omega\colon A \to K$, an endomorphism $M \in \mathrm{End}(A)$ with $\omega \circ M = \omega$ and the product given by $xy = \frac{1}{2}[\omega(y)M(x) + \omega(x)M(y)]$.

In this paper the authors study the mutation algebras in connexion with train algebras. They give some results concerning idempotents. In particular, if $\frac{1}{2}$ is train root, the train algebra can have idempotent or not. *Moussa Ouattara*