

**STATISTICAL EVALUATION OF THE
DETERMINATION OF NA, K, CA, FE, P IN FEED AND
PREMIXES BY ENERGY-DISPERSIVE X-RAY
FLORESCENCE SPECTROMETRY**

— research paper —

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Abstract: For development, maintenance and normal growth, reproduction, animals need in their diet a number of dietary minerals such as calcium (Ca), Phosphorus (P), potassium (K), sodium (Na) and iron (Fe). For the animals to be more productive, an appropriate nutritional composition of feed has to be chosen. Have to consider that quality of feed depends on many factors such as area of origin, plant type, soil. To assess accurately the quality of feed, with which animals must to be fed, it needs to establish a definite program of testing. For this purpose, laboratory tests are performed. Results obtained in the laboratory are a good indicator to determine the exact feed ratio for animals, before being fed. The aim of this study was to investigate the use of the energy-dispersive X-ray fluorescence spectrometry (EDXRF) for the measurement of calcium, phosphorus, potassium, sodium and iron concentration in feed and premixes.

Keywords: energy-dispersive X-ray fluorescence spectrometry (EDXRF), dietary minerals, feed, premixes.

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