

## Zootronic Engineering, 21<sup>st</sup> Century Profession

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It is the implementation of technologies such as computer science, mechanics, electronics, mechatronics, robotics in animal production, it is an innovative form of production within the scope of animal production that goes beyond conventional concepts and is based on the synergy obtained with the combination of different technological areas in addition to those already mentioned; Electronic engineering, instrumentation, control systems and technology (artificial intelligence and computing). The applications in animal production are numerous; they are a reality today; automation and robotics in livestock.

Modern livestock to improve management strategies must make use of technologies to measure and verify individual production indicators, and other behavioral and physiological indicators.

In milk production, for example, the daily production of milk and its fat and protein content, temperature, pedometers to record movement, estrus detection, and others are monitored and recorded automatically either together by a dairy robot or by individual instruments, body measures that help improve production and detect diseases, the same happens in the production of beef from cattle and pigs, goat sheep and other species used in human food.

In developed countries precision livestock and dairy robots are already commercial use and others are in that process; Stable cleaning robot, shearing robot and other robots used in animal production. At present, a profession is needed that can meet these challenges of the 21st century, which has the aforementioned knowledge in addition to those of zootechnics and animal production; animal anatomy and physiology, nutrition, animal breeding and improvement and animal production of monogastrics, Ruminants and alternative species.

The main objectives of this profession will be to maximize the individual and overall animal production of the herds, as well as minimize the use of medications by detecting diseases in a timely manner and preventing them.

Efforts are currently being made in Colombia to create such a profession, and in my country Mexico and in other developing countries efforts must be made in the same direction, the author achieved that in Mexico the agricultural mechatronic engineering profession is implemented, the same You try again for this profession [1-6].

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