Press release, 2025-08-25
Malmö, Sweden

aXichem files patent application for phenylcapsaicin as a feed additive for dairy cattle

aXichem AB (publ), (aXichem), a developer of innovative natural analogue feed additives and dietary supplement ingredients, announces that the company has filed a patent application for its phenylcapsaicin as an additive in feed for dairy cows with the aim to increase milk production. The patent application covers methods of use and dosing of phenylcapsaicin (aXiphen®) in dairy cattle feed and is filed on the background of promising initial findings in an exploratory field evaluation carried out in Brazil with aXiphen administered in the feed to Girolando dairy cattle. The filed patent application confirms aXichem's communicated patent strategy which aims to secure long term commercially interesting intellectual property connected to phenylcapsaicin

In 2024 Brazil was ranked the fifth largest milk producer in the world (www.ourworldindata.org), and some 80% of the country's milk production comes from Girolando cows. Girolando is a breed that is known for its ability to cope with the regional differences and seasonal changes in heat and humidity in the country, conditions that significantly impacts the milk yield. The average milk yield for Girolando cows in Brazil is approximately 17 liters per day (Embrapa Dairy Cattle, 2015, www.semadesc.ms.gov.br), which is in the lower span compared to other leading milk producing countries in the world. This means that milk producers in Brazil strive to increase the milk yield per cow, leveraging for example new technology and innovations in feed mix.

aXiphen was included in an exploratory field test in Brazil with Girolando cows, initiated by a dairy producer with an excellent production of about 39 liters per cow per day. In the test 54 Girolando cows got 15 mg phenylcapsaicin per day per cow (which corresponds to approximately 0.8 mg/kg of dry matter for this type of cattle) in their feed mix during a period of five weeks. This supplementation resulted in an average increase in milk yield of some 2 liters per day, representing an approximate 5% improvement in productivity.

Natural capsaicin has in studies proven to have a positive impact on milk-yield in dairy cattle, but in doses as high as 80 to 400 mg of capsaicin per cow per day depending on feed intake (*Animals,* Volume 14, Issue 7, 2024), https://www.mdpi.com/2076-2615/14/7/1075). Administration of higher doses of natural capsaicin could potentially increase the risk of gastrointestinal irritation and digestive disorders.

Torsten Helsing, CEO, comments:
"aXichem continues to focus on launching aXiphen in the poultry feed market, and to be dedicated to exploit the full potential of phenylcapsaicin. The results shown in the exploratory test with dairy cattle in Brazil, a test which was entirely market driven, looks promising and indicates that phenylcapsacin could become a cost-effective alternative, at a low and safe dose, to improve milk yield in large scale production. This patent application is part of our strategy to secure commercially interesting intellectual property connected to phenylcapsaicin."

About phenylcapsaicin and aXiphen

The health benefits of chili, with its active ingredient capsaicin have been known for centuries. aXichem's proprietary molecule, phenylcapsaicin, combines the naturally occurring phenyl group with capsaicin, bridged by a triple bond. The result is an innovative natural analogue capsaicin with high purity, where the pungency is greatly reduced.

Production tests and studies have proven the effectiveness of aXiphen® as an ingredient in poultry feed. A production test on on-floor salmonella prevalence, following the inclusion of 15 ppm phenylcapsaicin in a regular starter diet, was carried out in a full-scale commercial broiler production trial under farming conditions. The production test included about 1.6 million broiler chickens. The trial concluded that under the conditions of the test, the inclusion of 15 ppm phenylcapsaicin in broiler chicken feed statistically significantly reduced the number of farms with salmonella-positive floor boot swabs. The European model for production efficiency, EPEF, showed that production efficiency increased by 14% compared to traditional feeding.

The information was submitted, through the provision of the specified contact person, for publication on 25 August 2025, 08:30 AM CET.

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About aXichem

aXichem develops, patents and markets natural analogue industrial chemicals, i.e., synthetically produced substances that have similar and comparable properties to natural substances. The company's first product is phenylcapsaicin, which the company commercializes under two brands, aXiphen® and aXivite®, as an ingredient in animal feed and dietary supplements, respectively. The business is divided into three market areas with different applications for phenylcapsaicin: as an ingredient in feed for poultry, such as chicken and turkey; as an ingredient in food supplements for gut health, weight control and sports and exercise; and as an ingredient in food supplements for the bio-enhancement of curcumin and melatonin. aXichem is listed on the Nasdaq First North Growth Market. Certified advisor for aXichem is Västra Hamnen Corporate Finance AB.

More information is available at www.axichem.com.