

Featherless Broilers (Yissum)

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Featherless broiler chickens for improved meat production in hot conditions

Categories	Agriculture, Animal Breeding / Genetics, Animal Science / Vet. Medicine
Development Stage	A stock of fast-growing featherless broilers ready for commercial use
Patent Status	Unique (though non-patentable) genetic material and know-how
Market Size	2006 global production ~800 million broilers per week, rising 4% per year

Background

- Current commercial broilers require low temperatures for fast growth and high meat yield
- Hot conditions significantly reduce the efficiency, or increase the costs, of broiler production
- Featherless broilers easily dissipate excess body heat, avoiding the need for costly cooling or ventilation (even at high stocking densities), allowing sustainable, low-cost production

Our Innovation

Development of a unique stock of fast-growing featherless broilers together with a breeding scheme that upgrades standard commercial broiler stocks by producing 25% (or 50%) heat-tolerant, high-yield, featherless broilers, and 75% (or 50%) feathered broilers for live marketing at low body weight

Key Features

- Birds fully express their genetic potential under hot conditions, without cooling or ventilation
- Reach slaughter weight of about 2.2 kg at 6 weeks, with more than 40 kg/m2
- Meat yield and quality equals or surpasses standard broilers under optimal conditions
- These performances obtained on low-cost (low-protein and low-energy) feed
- Do not suffer from heat-related mortality or health problems

Development Milestones

- Genetic material featherless males for grandparent flocks ready for shipping
- Fine-tuning of management and diet composition to local conditions conducted on site

The Opportunity

• Majority of broilers worldwide are reared in hot tropical and sub-tropical regions of Asia, America and Africa, and the southern parts of the United States and China

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• Consumers, including those in developing countries, increasingly prefer processed broilers and meat; featherless broilers are ideal for processing and reduce the investment and operational costs associated with cooling and ventilating broiler houses

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