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Association of Hungarian
Small Animal Breeders for
Gene Conservation (MGE)
Godollo



Research Institute of Animal
Breeding and Nutrition
(ATK) Herceghalom –
Godollo



Research Institute for
Fisheries, Aquaculture
and Irrigation (HAKI)
Szarvas

HU-BA PRODUCTION SYSTEM FOR SPECIAL POULTRY PRODUCTS IN HUNGARY

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(GAK-OKO-TERM project)



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Since 2006, ATK is the legal successor of KATKI,



Commercial genotypes spreading

– rare breeds in danger



Free-range conditions



„Small Free Range Chicken”

Demand for special quality, traditional, free range products.

First was the Label Rouge (France)

Research Institute for Animal Breeding and Nutrition cooperating with the MGE started a project in 2005 for elaborating the genetic basis, management and control of production of the Hungarikum quality poultry meat. The OKO-TERM project was financed by Agency for Research Fund Management and Research Exploitation (KPI)

Consortium members:

**Research Institute for Animal
Breeding and Nutrition**



**Budapest University of Economic
Sciences and Public
Administration**



**LAB-NYÚL Breeding, Advisory
and Commercial Services Ltd.;**

**House of Hungarian Tastes
Advisory Ltd.;**

**Association of Hungarian Small
Animal Breeders for Gene
Conservation**



General description of HU-BA system

Trade mark and a complex system.

Its base is the trio of gene conservation – breeding – controlling and production system.

Gene conservation: MGE

Management and quality control: MGE and partners

Special poultry production: old Hungarian type poultry breeds, natural or ecological production and a comprehensive controlling system

Incorporation of poultry production into ecological plant cultures or horticultures.

This type of production can provide a model for development of ecological type mixed farming systems including poultry, **for other countries** too.



General description of HU-BA system

Crosses: For chicken meat the cross of White Transylvanian Naked Neck and Partridge colour Hungarian chicken



General description of HU-BA system

Crosses: For turkey meat: Copper turkey and "Hungarian" Bronze turkey;



and for goose meat Frizzled Hungarian goose male and Hungarian Upgraded goose female.

General description of HU-BA system

Controlling and production regulations of HU-BA production are quite similar to certified ecological (organic) production, and even stricter in some respect. It has been elaborated for every species and products. Some important regulations for HU-BA turkey production are shown in below (based on Label Rouge, with some difference highlighted in bold)

Density of birds in houses:	Till 7 weeks of age: max. 10/m ² After 7 weeks of age: max 6/m ² , but max. 25kg/m ² .
Number of birds in a house:	Max. 2500
Number of birds in a farm:	Max. 5000
Birds have acces to open air daily from at least 9.00h to sunset:	Not later than 7 weeks of age
Range is covered with green with an area:	Min. 30m²/bird
Breed of birds	Old Hungarian turkey breeds or they crosses
Earliest slaughter age	Min. 140 days of age
Live weight	Min. 3 – 5 kg, max. 5 – 7 kg

Breeds used for production of HU-BA products

Hungarian chicken breeds



Yellow Hungarian chicken

Breeds used for production of HU-BA products

Hungarian chicken breeds



White Hungarian chicken

Breeds used for production of HU-BA products

Hungarian chicken breeds



Speckled Hungarian chicken

Breeds used for production of HU-BA products

Hungarian chicken breeds



Partridge colour Hungarian chicken

Breeds used for production of HU-BA products

Transylvanian Naked Neck chicken



White Transylvanian Naked Neck chicken

Breeds used for production of HU-BA products

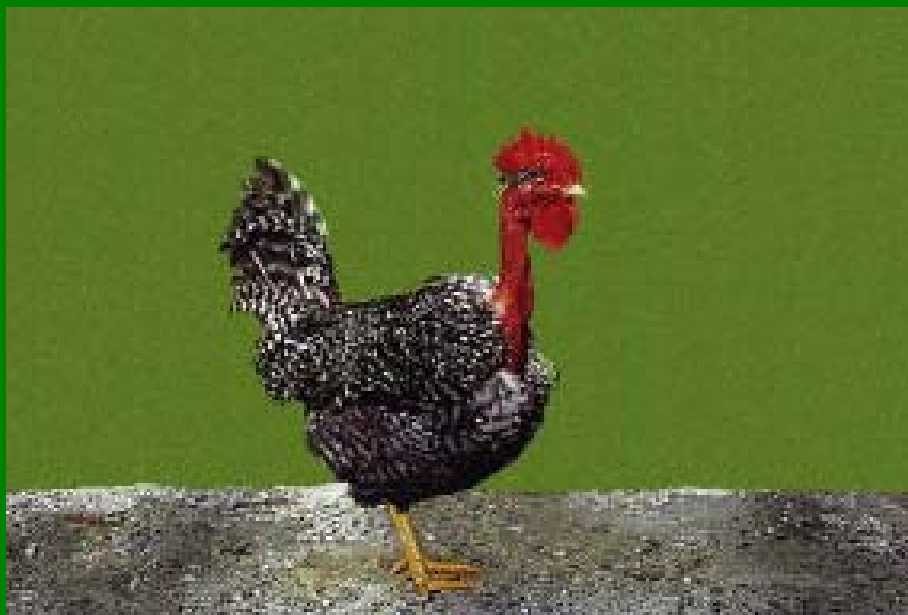
Transylvanian Naked Neck chicken breeds



Black Transylvanian Naked Neck chicken

Breeds used for production of HU-BA products

Transylvanian Naked Neck chicken breeds



Speckled Transylvanian Naked Neck chicken

Breeds used for production of HU-BA products

Turkey breeds



Copper turkey

Breeds used for production of HU-BA products

Turkey breeds



"Hungarian" Bronze turkey

Breeds used for production of HU-BA products

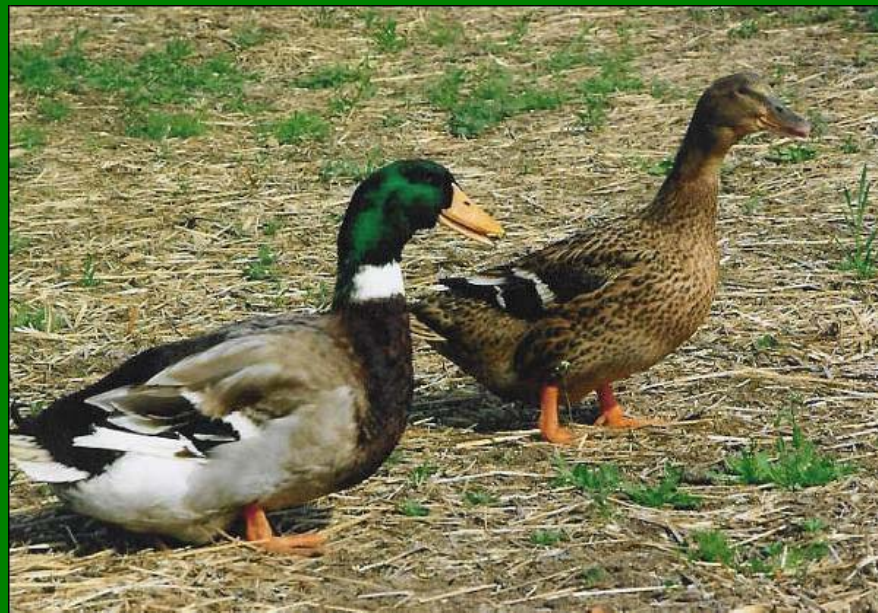
Hungarian Guinea Fowl



Hungarian Guinea Fowl

Breeds used for production of HU-BA products

Hungarian Duck



Hungarian Duck

Breeds used for production of HU-BA products

Hungarian goose and its frizzled variant



Hungarian goose and its frizzled variant

HU-BA products

Spring chicken: Traditional, Hungarian product. 1 kg live weight at 10-12 weeks of age.

Table chicken: 1,6-2,0 kg live weight at 12-18 weeks of age.

Soup hen: after finishing 1st egg production with 2,0-2,5 kg live weight.

Capon: Roosters castrated at young age, marketed at 6 months of age with 3 kg live weight.

Table turkey: 4-5 kg live weight at 20-24 weeks of age. Connection with feasts around Christmas.

Table guinea fowl: 1,0-1,4 kg live weight.

Table goose: 3-4 kg live weight at 10-12 weeks of age.

Table duck: 2,0-2,5 kg live weight.

HU-BA egg: eggs of chicken or guinea fowl.

Results of HU-BA project – turkey example

Body weight of „Hungarian” Bronze turkey significantly exceeds the body weight of Copper turkey.

Heterosis in body weight by crossing the two breeds.

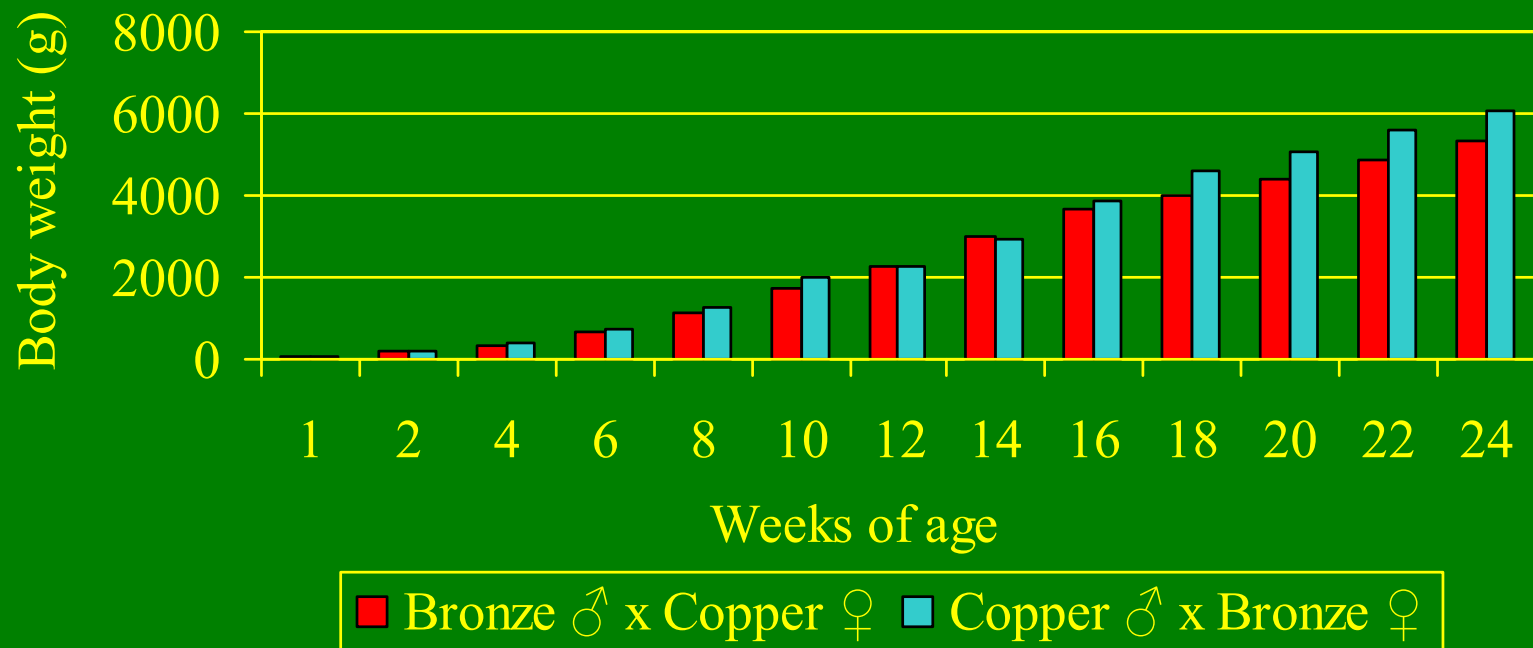
Egg production of Bronze layers is higher by 5-10% than that of Copper layers throughout the laying cycle, while Copper breed shows better hatchability. Total number of chicks and egg weight are still in favour of Bronze, therefore Copper ♂ x Bronze ♀ crossing is recommended for turkey meat production in HU-BA system.

Regulations for rearing HU-BA turkey have been elaborated, based on Label Rouge and organic regulations, however, certain regulations (breed, pasture area and max. live weight) differ from those.

Results of HU-BA project – turkey example

Examination of crosses:

Crossing of Copper ♂ and Bronze ♀ the body weight gain of offspring was higher than of Bronze ♂ and Copper ♀ (below). In feed conversion ratio no significant difference was found.



Results of HU-BA project – turkey example

Examination of pasture area:

Area limited to 30 m² and „unlimited” 90 m² per turkey (table below). Bigger pasture area worsen body weight and feed conversion of males. On the other hand the lower (30 m²/turkey) area is sufficient for turkeys by our ethological observations but necessary for high quality production and to preserve the pasture.

Pasture area	Weeks of age						
	12	14	16	18	20	22	24
	Males						
90 m ² /bird	2411	2735	3284	3749	5059	5431	6209
30 m ² /bird	2515	3058	3622	4132	5478	5902	6573
	Females						
90 m ² /bird	1981	2336	2719	3026	3621	3729	4139
30 m ² /bird	1990	2338	2744	3038	3650	3716	3969

Possibilities of the implementation of HU-BA system in Vietnam

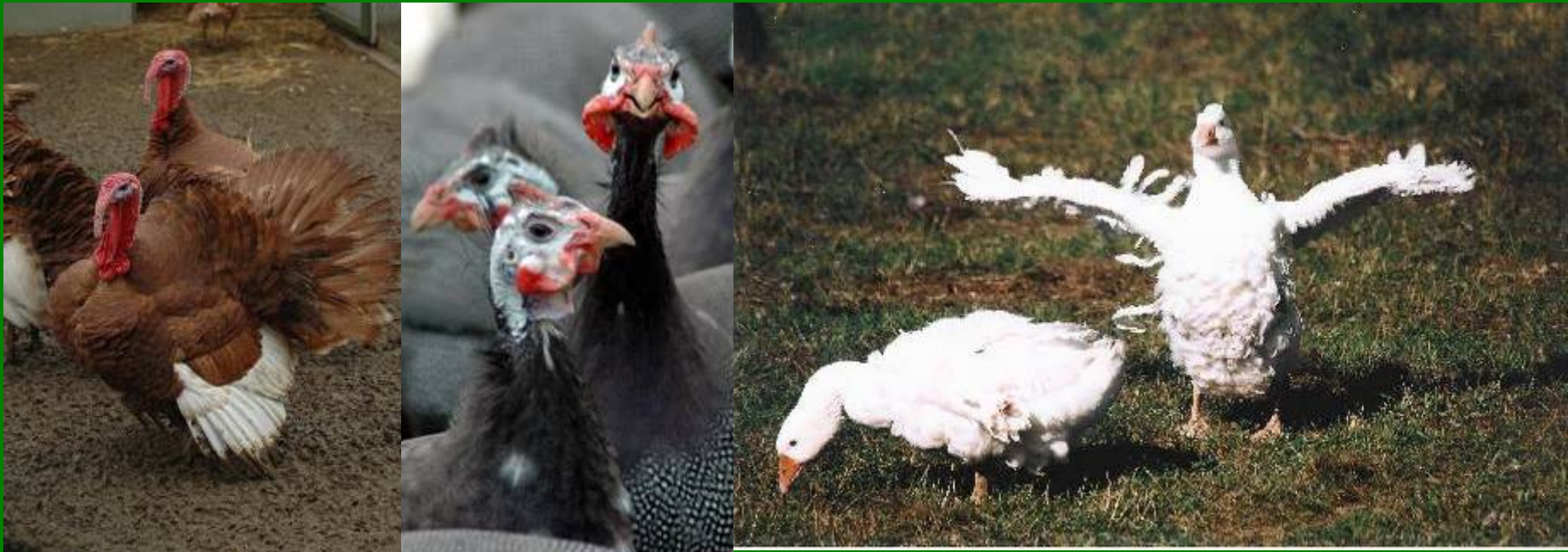
Many local poultry – and other farm animal – breeds, most of them in danger.

Consumer's demand for special quality products both in Vietnam and in other countries in the Far-East (e.g. China, Japan).

HU-BA: a sample.

The system can be adaptable to Vietnamese conditions with:

old Hungarian poultry breeds (mainly: turkeys, guiney fowls and **geese**)



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HU-BA: a sample.

The system can be adaptable to Vietnamese conditions with:

- old Hungarian poultry breeds (mainly: turkeys, guiney fowls and **geese**)
- traditional, local breeds.



Possibilities of the implementation of HU-BA system in Vietnam

Knowledge in Vietnam and in Hungary

Experiences:

Hungarian

Living in Hungary

Vietnamese (educated in Hungary)

Thank you for your attention!



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