# BABOLNA TETRA

DUAL PURPOSE HYBRIDS

MANAGEMENT GUIDE



**BABOLNA SUPER HARCO & BABOLNA TETRA-H** 



#### MANAGENT GUIDE FOR REARING AND PRODUCTION

The **Babolna Tetra-H** and the **Babolna Super Harco** hybrids, introduced in the management guide of Babolna Tetra Kft., are dual-purpose rural hybrids, which have become deservedly really popular not only amongst the domestic producers but also amongst those in the neighbouring countries. This management guide uses the appellation **rural hybrid** for both breeds.

The calm characteristic, coloured — straw- and wheat-coloured feathers with black tail feathers -, Babolna Tetra-H, which produces excellently under free-range conditions is adequate to satisfy the egg and poultry meat needs of families. The heavy weight males with good conformation are ready for slaughtering at the age of 10-12 weeks with the body weight over 1,6 kg, while the females start the production at the age of 21-22 weeks.

The Babolna Super Harco is sexable at day-old based on the white spot on the head, which makes the separate rearing of males and females easier. The barred males, fattened as 'rural broilers' will produce delicious taste meat, equal to that of Babolna Tetra-H, but with a bit faster body weight development. In Western Europe this hybrid is preferred for free-range and bio programs.

## **Specifications of the hybrids**

During the management of Babolna Tetra-H and the Babolna Super Harco rural hybrids, the following results can be achieved:

Description	BABOLNA TETRA-H		BABOLNA SUPER HARCO		
	Intensive	Extensive	Intensive	Extensive	
Mortality during rearing until 10 weeks of age	2-3%	3-4%	3-4%	4-5%	
Mortality during rearing until 20 weeks of age	4-5 %	4-5%	5-6%	5-6%	
Male body weight at 12 weeks of age	1,5–1,7 kg	1,2–1,5 kg	1,6-1,8 kg	1,3-1,6 kg	
Female body weight at 20 weeks of age	2,0-2,2 kg	1,8–2,0 kg	2,1-2,3 kg	1,9-2,1 kg	
Start of the production (weeks of age)	21-22	22-23	21-22	22-23	
50% egg production (weeks of age)	23-24	25-26	23-24	25-26	
Peak production (weeks of age)	29-30	30-31	29-30	30-31	
Egg production during 12 months of production	230-250 pcs	180-200 pcs	210-230 pcs	170-190 pcs	
Daily feed consumption during production	130-140 g	130-140 g	135-145 g	135-145 g	
Average egg weight	60-62 g	60-62 g	60-62 g	60-62 g	
Female body weight	2,5-3,0 kg	2,5-3,0 kg	2,7-3,2 kg	2,7-3,2 kg	



In rural production, because of the different production types, the different circumstances and spaces it is difficult to elaborate a usual rearing and production guide. Instead of the strict rules we give directions, during the realisation of which the high production potential present in the rural hybrids will be explored.

# **Requirements**

At the development of the rural hybrids we took into consideration that the houses used for husbandry can be really variable, but they basically differ from large-scale systems in a sense that they have natural light and barn system or can be completely closed. In the case of closed or semi open houses the adequate system is to use slats, where it means 2/3 part of it as surface of living space.

When choosing the feeder, one very important aspect is to prevention of feed spilling and the other aspect is that the system should be easily cleaned and disinfected. The same conditions are valid for the drinking system. During the first weeks make sure supplementary heating is available for the chicks. In case of closed house make sure the ventilation and air change is correct, but avoid draft.

During the production the nests are an important supplementary installation. It is preferred to use units of ~30x25x40 cm nest with 40-50 cm high feet. It is advised to build a threshold of 10-12 cm within the nest in order to avoid the scratching of the litter. Ordinarily we count one nest for 4-5 hens.

#### Preparation for housing the new flock

The day-old chicks should be placed into a carefully prepared house only. The place should be pathogen-free (bacteria, fungi), because infections will increase day-old mortality.

## **Density**

The following density is recommended in order to reach the correct weight development and egg production in case the house is closed or semi open:

- 1-10 weeks of age: for 1 m<sup>2</sup> rearing space 16-18 pcs chicks can be placed
- From 10 weeks of age after the elimination of the males there is a bigger space available for the remaining females, so for the same space for 1  $m^2$  density will be  $\sim$  8-9 pcs
- During the production it is recommended to place a maximum of 7 hens for 1 m<sup>2</sup> in a house with slats at the same time in a deep litter it is 6 hens/m<sup>2</sup>.



#### Feeding and drinking space

The day-old chicks are fed first in the cartons or in the feed trays. If dome drinkers are used for drinking then use 1 feeder tray and 1 dome drinker for 100 chicks. Later for 100 chicks use a trough feeder of 5 m and 8 pcs circular feeder (0,4 diameter). The recommended drinking space per 100 chicks are 2,5 m trough drinker or 4 circular drinkers. From the age of 10 weeks the demand will be duplicated, but the elimination of the males will gradually decrease the number of the flock to half of the original number, so there is no need to execute essential modifications.

#### Temperature, house climate

At the age of one day, the temperature demand is very high. For a development without problems it is essential to set the temperature above +30 °C during the first days. From weeks 4-5 the temperature demand becomes less. In case of closed house the ammonia formation has to be stopped by changing the air. To fix the ammonia occasionally disperse some superphosphate to the manure.

#### **Feeding**

In rural poultry breeding several varieties exist with regards to feeding. In case we feed complete mixed feed, the following method is recommended:

1-4. weeks of age
5-20. weeks of age
From week 21.
Starter
Grower
Layer

In rural circumstances it is ordinary to use half feed and half cereal grains or by-product. This type of feeding can be used in case of rural hybrids, but pay attention to the following:

- during the 3-4 weeks of age give only feed, and gradually change to a lighter mixture
- in the production period take care that minerals are adequately supplied, with special attention to lime, partly grained limestone, partly with mineral supplements available on sales

#### **Feed recommendation**

The following data of need is valid for rural hybrids:

Appellation	I. 1-4. weeks Starter	II. 5-20. weeks Grower or home mixture	III. From week 21 Layer or home mixture	
Crude protein %	21-23	15-16	17-18	
Energy, MJ/kg	11-12	10-11	11-12	
Calcium, total %	1,0	1,0	3,75	
Phosphore, total %	0,7	0,65	0,7	



## The practice of feeding

In case of rural hybrids we distinguish two different periods according to dual purpose utilization. During the first part of the rearing the main objective is to make the chicks strong. This is the period of the development of the immune and digestive systems. It is indispensable to have a good quality feed and ad libitum feeding.

From 4-5 weeks of age gradually use grower feed or home mixture of lower quality in case the body weight development was adequate. In the second part of the rearing period the bones, the muscular system and the feathers develop. With regards to the males, if the aim is to develop body weight more, than feed them with better quality feed ad libitum. If the males and females are reared separately, after the elimination of the males it is important to measure the feed economically, because too much feed consumption will adversely affect egg production. It is extremely important not to develop unnecessary fat on the pullets after 13-14 weeks of age, as this would have negative effects on the development of the sex organs, and by this on the later egg production.

## **Body weight development and feeding of males**

By the application of the feeding shown in the following chart the feed consumption and body weight development are to be reached according to the chart.

Week of age	Average body weight (kg)	Weekly feed consumption (g)	Cum. feed Consumption (kg)	Average body weight (kg)	Weekly feed consumption (g)	Cum. feed Consumption (kg)	
	Babolna TETRA-H			Babolna Super Harco			
1	0,09	90	0,09	0,09	95	0,09	
2	0,19	190	0,28	0,20	200	0,29	
3	0,35	220	0,50	0,37	231	0,53	
4	0,49	250	0,75	0,51	263	0,79	
5	0,62	280	1,03	0,65	294	1,08	
6	0,76	320	1,35	0,80	336	1,42	
7	0,89	370	1,72	0,93	389	1,81	
8	1,02	420	2,14	1,07	441	2,25	
9	1,16	480	2,61	1,22	504	2,75	
10	1,29	500	3,11	1,35	525	3,28	
11	1,42	520	3,63	1,49	546	3,82	
12	1,55	550	4,18	1,63	578	4,40	
13	1,69	570	4,75	1,77	599	5,00	
14	1,82	580	5,33	1,91	609	5,61	



Until 9-10 weeks of age the feed used for 1 kg body weight development is between 2,2-2,4 kg, but after that this ratio gradually deteriorates. However, usually it is about cheaper feed use, but at the same time in case of flocks with heavier body weight after weeks 12-14 fattening is less economic.

#### **Body weight development and feeding of females**

In case of rural hybrid females from week 10 economic feeding, controlled feeding is recommended, and by this the following body weight development is expected.

Week of age	Average body weight (kg)	Daily feed consumption (g)	Cum. feed consumption (kg)	Average body weight (kg)	Daily feed consumption (g)	Cum. feed consumption (kg)	
	Babolna Tetra-H			Babolna Super Harco			
1-10	3,100			3,300			
11	1,10-1,30	65	3,555	1,15-1,35	70	3,790	
12	1,20-1,40	65	4,010	1,25-1,35	70	4,280	
13	1,30-1,50	70	4,500	1,35-1,55	75	4,805	
14	1,40-1,60	70	4,900	1,45-1,60	75	5,330	
15	1,50-1,70	75	5,515	1,55-1,70	80	5,890	
16	1,60-1,80	80	6,075	1,70-1,90	85	6,485	
17	1,70-1,90	85	6,670	1,80-2,00	90	7,115	
18	1,80-2,00	85	7,265	1,90-2,10	90	7,745	
19	1,90-2,10	85	7,860	2,00-2,20	90	8,375	
20	2,00-2,20	85	8,455	2,10-2,30	90	9,005	

At the beginning of the production period the feed portion can be gradually augmented until reaching the 140-145 g/day/female. A higher portion than this is not recommended, because too much fat will be harmful for production.

## **Sanitary recommendations**

In husbandry, it is important to prevent the entering of infectious diseases. It is essential to maintain biological purity in order to protect our flock from infectious poultry diseases. It is a general rule that cleanness should be kept and external environmental damages should be kept away. Our veterinarians give advice with pleasure on protective vaccination. They recommend that the rural hybrid flocks should be vaccinated against Marek-disease, infectious bronchitis, Gumboro disease, Newcastle disease and fowl pox. If a disease is suspected within the flock immediately recourse to a veterinarian.



Week of age	BABOLNA TETRA-H			BABOLNA SUPER HARCO		
	Production %	Egg Pcs/hen	Cum Pcs/hen	Production %	Egg Pcs/hen	Cum Pcs/hen
21	10,0	0,7	0,7	7,0	0,5	0,5
22	24,0	1,7	2,4	20,0	1,4	1,9
23	40,0	2,8	5,2	36,0	2,5	4,4
24	60,0	4,2	9,4	55,0	3,9	8,3
25	74,0	5,2	14,6	70,0	4,9	13,2
26	80,0	5,6	20,2	76,0	5,3	18,5
27	83,0	5,8	26,0	80,0	5,6	24,1
28	85,0	6,0	31,9	81,0	5,7	29,8
29	85,0	6,0	37,9	82,0	5,7	35,5
30	84,2	5,9	43,8	82,0	5,7	41,2
31	83,4	5,8	49,6	81,5	5,7	46,9
32	82,7	5,8	55,4	80,6	5,6	52,6
33	81,9	5,7	61,1	79,7	5,6	58,2
34	81,1	5,7	66,8	78,8	5,5	63,7
35	80,3	5,6	72,4	77,9	5,5	69,1
36	79,6	5,6	78,0	77,0	5,4	74,5
37	78,8	5,5	83,5	76,1	5,3	79,9
38	78,0	5,5	89,0	75,2	5,3	85,1
39	77,2	5,4	94,4	74,3	5,2	90,3
40	76,4	5,4	99,7	73,5	5,1	95,5
41	75,7	5,3	105,0	72,6	5,1	100,5
42	74,9	5,2	110,3	71,7	5,0	105,6
43	74,1	5,2	115,5	70,8	5,0	110,5
44	73,3	5,1	120,6	69,9	4,9	115,4
45	72,6	5,1	125,7	69,0	4,8	120,2
46 47	71,8 71,0	5,0 5,0	130,7 135,7	68,1 67,2	<u>4,8</u> 4,7	125,0 129,7
48	70,2	4,9	140,6	66,3	4,7	134,3
49	69,4	4,9 4,9	145,4	65,4	4,6	138,9
50	68,7	4,8	150,2	64,4	4,5	143,4
51	67,9	4,8	155,0	63,4	4,4	147,9
52	67,1	4,7	159,7	62,4	4,4	152,2
53	66,3	4,6	164,3	61,3	4,3	156,5
54	65,6	4,6	168,9	60,3	4,2	160,8
55	64,8	4,5	173,5	59,3	4,2	164,9
56	64,0	4,5	177,9	58,3	4,1	169,0
57	63,2	4,4	182,4	57,3	4,0	173,0
58	62,4	4,4	186,7	56,3	3,9	176,9
59	61,7	4,3	191,1	55,2	3,9	180,8
60	60,9	4,3	195,3	54,2	3,8	184,6
61	60,1	4,2	199,5	53,2	3,7	188,3
62	59,3	4,2	203,7	52,2	3,7	192,0
63	58,6	4,1	207,8	51,2	3,6	195,6
64	57,8	4,0	211,8	50,2	3,5	199,1
65	57,0	4,0	215,8	49,1	3,4	202,5
66	56,2	3,9	219,7	48,1	3,4	205,9
67	55,4	3,9	223,6	47,1	3,3	209,2
68	54,7	3,8	227,5	46,1	3,2	212,4
69	53,9	3,8	231,2	45,1	3,2	215,6
70	53,1	3,7	234,9	44,1	3,1	218,6
71	52,3	3,7	238,6	43,0	3,0	221,7
72	51,6	3,6	242,2	42,0	2,9	224,6
73	50,8	3,6	245,8	41,0	2,9	227,5
74	50,0	3,5	249,3	40,0	2,8	230,3

