

Trouble- Tracing Chart

Bad Hatching Results Symptoms, Causes and Necessary Actions

A) Symptoms	B) Probable Causes	C) Necessary Actions
1) <u>Clear eggs</u> (Infertile) No blood ring or indication of embryo	1) Bad mating/ old males 2) Too old eggs 3) Hens are too thin or have too little movement space	1) 8-10 strong males per 100 hens 2) Eggs should not be more than 8 days old 3) See that feed and water allocation is sufficient
2) <u>Egg candling</u> Unfertile, but blood is seen and very small occurring embryos	1) Too high temperature in incubator 2) Eggs not properly stored, too cold 3) Hens in bad condition (too cold nests) 4) Vitamin deficiency 5) Wrong fumigation procedure	1) Check and ensure exact temperature 2) Store the eggs in a frost-free and dark room. Preferably at 12-15C° (53-59°F) and approx. 75% humidity. 3) Do not use eggs from birds in houses with too cold nests or with infectious diseases 4) Use correct vitamin-rich feed before and during incubation 5) Check that the medicine dose is correct. – Eggs should not be fumigated between the 2 nd and the 5 th day after setting in incubator.
3) <u>Dead chick embryos</u> Dying from 12 th to 18 th day	1) Wrong incubating temperature 2) Insufficient ventilation 3) Insufficient feeding of parents 4) B.W.D. (Pullorum disease) or other infectious diseases	1) Exact and constant temperature regulation 2) Sufficient fresh air in incubator room, correct setting of ventilation in incubator. (Check that power supply is correct and not fluctuating) 3) Correct feeding with a correct feed mixture 4) Use only eggs from sound, disease-free stock. Inspect and check hygiene in hatchery and from egg supplier

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<p>4) <u>Fully developed chicks</u></p> <p>But dead without breaking the shell</p>	<ol style="list-style-type: none"> 1) Insufficient or wrong turning of eggs (small machines) 2) Heredity 3) Wrong temperature 	<ol style="list-style-type: none"> 1) Turn the eggs at least 5 times a day and in such a way that they are not lying on the same side two nights in succession 2) Layers should be checked as to hatchability of the eggs and viability of the chicks 3) Check temperature in the machine, for instance with a tested, correctly showing thermometer
<p>5) <u>Pipped eggs</u></p> <p>But chicks dead in shells</p>	<ol style="list-style-type: none"> 1) Average humidity too low 2) Average heat too low 3) Excessive high temperature in short periods 	<ol style="list-style-type: none"> 1) Keep constant and exact humidity during incubation – corresponding to development of the eggs (size of air space) 2) Keep constant and exact temperature all through the incubation 3) Pay attention to temperature fluctuations
<p>6) <u>Sticky chicks</u></p> <p>egg shell sticks to the chicks</p>	<ol style="list-style-type: none"> 1) Eggs are dried too much, incubation too dry 2) Too little humidity during hatching 	<ol style="list-style-type: none"> 1) Keep constant and correct humidity during incubation. Between 52 and 58% RH. The exact humidity may be found by means of the weighing or the floating method. 2) Increase the humidity to 65-70% when the chicks begin to break
<p>7) <u>Sticky chicks</u></p> <p>Chicks smeared with rests of egg content</p>	<ol style="list-style-type: none"> 1) Too low average temperature 2) Too small air cell caused by too high average humidity 	<ol style="list-style-type: none"> 1) Constant and exact temperature 2) Increase ventilation and reduce humidity

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8) <u>Undeveloped navels</u> (bleeding)	1) Too high temperature or too big fluctuations in temperature 2) Too little humidity	1) Careful temperature control 2) Exact and constant humidity
9) <u>Too small chicks</u>	1) Too small hatching eggs 2) Tool little humidity 3) Too high temperature	1) Do not use hatching eggs under 55g 2) Keep a correct humidity 3) Check the temperature
10) <u>Big, weakly built chicks</u>	1) Too low average temperature 2) Poor (too little) ventilation	1) Keep correct temperature 2) Correct and sufficient ventilation, check that power supply does not fluctuate
11) <u>"Mushy" chicks</u> Chicks dead in hatching trays or in transport boxes, and emitting a very strongly stinking smell	1) Navel infection during hatching 2) Low average temperature I periods during incubation	1) Careful disinfection and cleaning of the machine. (Fumigation with formaldehyde or the like) 2) Check temperature in the machine, for instance with a tested, correctly showing thermometer
12) <u>Insufficient fluff on chicks</u>	1) Too high temperature 2) Too low humidity	1) Exact temperature 2) Careful humidity control
13) <u>Chicks break too early</u> – and with bleeding navels	1) Too high temperature	1) Careful temperature control
14) <u>Prolonged hatching</u> , a few chicks come out too early, but hatching too slow and bad in the end	1) Too high temperature	1) Careful maintenance of the machine

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15) <u>Late hatching</u> the chicks do not break until 21 st day	1) Too low average temperature	1) Check temperature in the machine, for instance with a tested, correctly showing thermometer
16) <u>Malformed chicks</u>	1) Cross beak – heredity 2) Missing eyes – malformed 3) Crooked toes 4) Distorted neck – nutrition (?)	1) Careful selection of layers 2) Need for change of layers 3) Check temperature 4) Not quite known
17) <u>Chicks particularly strongly yellow coloured</u> heavy-breathing	1) Too strong formaldehyde fumigation	1) Should be exactly adapted and instruction observed