

AVIAN GENETIC CALCULATOR

Version 1
2005

Created by K Yorke

GENETIC CALCULATOR (INDIAN RINGNECK PARROT) Help File

© 2016 K Yorke

GENETIC CALCULATOR (INDIAN RINGNECK PARROT) Help File

© 2016 K Yorke

All rights reserved. No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the written permission of the publisher.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

Printed: June 2016

Publisher

*K YORKE
10 GWANDALAN CLOSE
BRANDY HILL, NSW, 2324
AUSTRALIA*

kyorke@tpg.com.au

<http://bit.ly/yorkestuff>

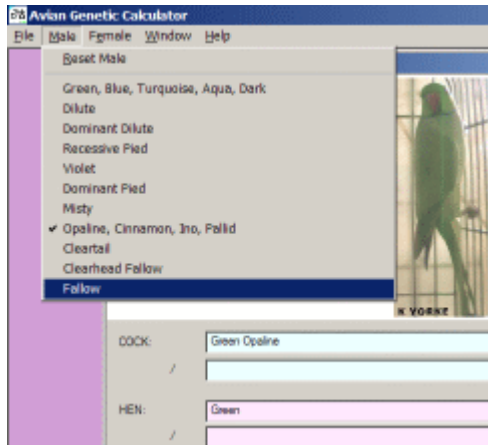
Table of Contents

Part I Mating Window	4
Part II Reset	5
Part III Green, Blue, Turquoise, Aqua, Dark	5
Part IV Dilute	6
Part V Dominant Dilute	6
Part VI Recessive Pied	7
Part VII Violet	8
Part VIII Dominant Pied	9
Part IX Misty	9
Part X Opaline, Cinnamon, Ino, Pallid	10
Part XI Cleartail	11
Part XII Clearhead Fallow	12
Part XIII Fallow	12
Part XIV Grey	13
Index	14

1 Mating Window

AVIAN GENETIC CALCULATOR (INDIAN RINGNECKED PARROT)

[Top](#) [Next](#)



The following menu selections are used to progressively build up the descriptions of the Cock and Hen parents one variety at a time in the Mating Window.

MALE/FEMALE Menu

[Reset](#)
[Green, Blue, Turquoise, Aqua, Dark](#)
[Dilute](#)
[Dominant Dilute](#)
[Recessive Pied](#)
[Violet](#)
[Dominant Pied](#)
[Misty](#)
[Opaline, Cinnamon, Ino, Pallid](#)
[Cleartail](#)
[Clearhead Fallow](#)
[Fallow](#)
[Grey](#)

Unsupported varieties still undergoing genetic research:-
Recessive Ino, Slaty, Mottle, Emerald

2 Reset

RESET

[Top](#) [Previous](#) [Next](#)

The Reset menu is a fast method of deselecting all previously selected varieties and resetting the male or female parent description to its original default settings when the Mating Window was first opened.

3 Green, Blue, Turquoise, Aqua, Dark

GREEN, BLUE, TORQUOISE, AQUA, DARK

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Green, Blue, Turquoise, Aqua and Dark factor birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

VARIETY INFORMATION

The genes for the wild Green, Blue, Aqua and Turquoise varieties exist at the same location and are multiple alleles.

The gene for Dark factor is ASSUMED to reside on the same chromosome (as is the case in the budgerigar) but this has not been conclusively proven for the Indian Ringnecked Parrot. The crossover rate between the Dark gene and the Green gene (or its alleles) is 14% (based on budgerigar data). Green is dominant over Aqua and Turquoise and Blue.

The Dark factor gene (responsible for the 3 shades of each colour) is a partial dominant gene.

ALTERNATIVE NAMES

Turquoise = Pastel

4 Dilute

DILUTE

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Dilute birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Dilute is recessive to Normal.

ALTERNATIVE NAMES

Dilute = Suffused, Citron

5 Dominant Dilute

DOMINANT DILUTE

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Dominant Dilute birds.

To change the parent bird description, click the mouse on the desired item in the list and press

SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Dominant Dilute is a dominant gene. This variety has in the past been called Fallow, however other varieties better fit the fallow description.

ALTERNATIVE NAMES

Dominant Dilute = Fallow = Isabel

6 Recessive Pied

RECESSIVE PIED

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Recessive Pied.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Recessive Pied gene is a recessive gene.

ALTERNATIVE NAMES
Recessive Pied = USA Pied

7 Violet

VIOLET

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Violet birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Violet gene is a dominant gene. The Violet variety is sometimes mistaken for the Dark factor.

8 Dominant Pied

DOMINANT PIED

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Dominant Pied birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Dominant Pied gene is a dominant gene.

9 Misty

MISTY

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Misty birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The gene for Misty is dominant.

10 Opaline, Cinnamon, Ino, Pallid

OPALINE, CINNAMON, INO, PALLID

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the sex linked varieties of Opaline, Cinnamon, Ino, and Pallid.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The above genes all lie on the X chromosome which also influences gender. All the above genes are sex-linked recessive to normal in cocks. Being sex-linked, hens cannot be split for these varieties. Hens cannot be double factor for these genes. In addition, the Pallid and Ino genes lie at the same location and are multiple alleles, with Pallid being partial dominant over Ino. The crossover rates for these genes are approximately:- Opaline - 30% - Ino - 3% - Cinnamon; based on budgerigar data.

Due to gene crossovers some cocks containing more than one sex-linked variety in their makeup can be configured as Type 1 or Type 2. The strict definition of a Type 1 bird is that the most recessive genes lie on the same chromosome. Type 2 birds have the most recessive genes on opposite chromosomes. For example:-. PallidIno/Opaline Type 1 Cinnamon Type 2 has the Ino and Opaline genes on one chromosome (as Ino is classed as more recessive than Pallid) and Cinnamon and Pallid on the other chromosome.

ALTERNATIVE NAMES

Green Ino = Lutino
Blue Ino = Albino
Pallid = Lime = Lacewing

11 Cleartail

CLEARTAIL

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Cleartail birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Cleartail gene is recessive to Normal. This variety was formerly known as Clearhead-Cleartail.

ALTERNATIVE NAMES

Cleartail= Clearhead-Cleartail
Green Cleartail = Yellowhead-Yellowtail
Blue Cleartail = Whitehead-Whitetail
Turquoise Cleartail = Creamhead-Whitetail Pastel

12 Clearhead Fallow

CLEARHEAD FALLOW

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Clearhead Fallow birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Clearhead Fallow gene is recessive to Normal.

ALTERNATIVE NAMES

Clearhead Fallow = Buttercup = Dun Fallow

13 Fallow

FALLOW

[Top](#) [Previous](#) [Next](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Fallow birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The Fallow gene is recessive to Normal.

ALTERNATIVE NAMES

Fallow = Recessive Cinnamon = Bronze Fallow

14 Grey

GREY[Top](#) [Previous](#)

This menu opens the Variety Combination Window containing a list of all possible genetic combinations involving the Grey birds.

To change the parent bird description, click the mouse on the desired item in the list and press SELECT/DONE.

Photographs of some items in the list can be viewed if a camera icon appears in the PICTURE column. Highlight the desired item in the list with the mouse and press the SHOW PICTURE button.

Selecting NORMAL from this list means that the selected bird contains no other genes from list, but may or may not contain genes from other lists in other Variety Combination windows,

VARIETY INFORMATION

The gene for Grey is dominant.

ALTERNATIVE NAMES

Grey Blue = Grey

Grey Green = Greygreen

Index

- A -

Albino 10
Aqua 5

- B -

Blue 5
Buttercup 12

- C -

Cinnamon 10
Clearhead Fallow 12
Clearhead-Cleartail 11
Cleartail 11
Cobalt 5

- D -

Dark Green 5
Dilute 6
Dominant Dilute 6
Dominant Pied 9

- F -

Fallow 6, 12

- G -

Green 5
Grey 13
Grey Green 13

- I -

Ino 10

- L -

Lacewing 10
Lutino 10

- M -

Mating Window 4
Mauve 5
Misty 9

- O -

Olive Green 5
Opaline 10

- P -

Pallid 10
Pastel 5

- R -

Recessive Pied 7
Reset 5

- S -

Sex Linked 10
Suffused 6

- T -

Turquoise 5

- U -

USA Pied 7

- V -

Violet 8

- W -

Whitehead-Whitetail 11

- Y -

Yellowhead-Yellowtail 11