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Ducks World

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Abstract: Duck is the common name for a large number of species in the waterfowl family Anatidae, which also includes swans and geese. The ducks are divided among several subfamilies in the family Anatidae; they do not represent a monophyletic group (the group of all descendants of a single common ancestral species) but a form taxon, since swans and geese are not considered ducks. Ducks are mostly aquatic birds, mostly smaller than the swans and geese, and may be found in both fresh water and sea water. Ducks are sometimes confused with several types of unrelated water birds with similar forms, such as loons or divers, grebes, gallinules, and coots. The objective of this article is the classification of ducks and understands what species of ducks and the differences between breeds of domesticated ducks.

Key words; Mallard, Muscovy, domesticated ducks, wilds ducks, Scientific Classification,

Duck word origin

The word *duck* comes from Old English **dūce* "diver", a derivative of the verb **dūcan* "to duck, bend down low as if to get under something, or dive", because of the way many species in the dabbling duck group feed by upending; compare with Dutch *duiken* and German *tauchen* "to dive". This word replaced Old English *ened/ænid* "duck", possibly to avoid confusion with other Old English words, like *ende* "end" with similar forms. Other Germanic languages still have similar words for "duck", for example, Dutch *eend* "duck" and German *Ente* "duck". The word *ened/ænid* was inherited from Proto-Indo-European; compare: Latin *anas* "duck", Lithuanian *ántis* "duck", Ancient Greek *nēssa/nētta* (νήσσα, νήττα) "duck", and Sanskrit *ā́tī* "water bird", among others A duckling is a young duck in downy plumage^[1] or baby duck; but in the food trade young adult ducks ready for roasting are sometimes labelled "duckling. A male duck is called a drake and the female duck is called a duck, or in ornithology a hen.

Duck classification

Ducks are classified into domesticated duck and wild duck

Domesticated duck: are ducks that are raised for meat, eggs and down. Many ducks are also kept for show, as pets, or for their ornamental value. Almost all varieties of domesticated duck are descended from the mallard (*Anas platyrhynchos*), apart from the Muscovy duck (*Cairina moschata*)

Wild duck: These non-domesticated breeds and there are more than 35 wild strains of the genus and is a benefit from it economically only in hunting.

There is another division for the ducks by feeding method as follows

Dabbling duck: a type of shallow water duck that feeds primarily along the surface of the water or by tipping headfirst into the water to graze on aquatic plants, vegetation and insects. These ducks are infrequent divers and are usually found in small ponds, rivers and other shallow waterways, or else they may stay near the shallow, slower edges of larger waterways.

Diving duck: A type of duck that dives deeply and swims underwater to feed on aquatic vegetation, insects and occasionally small fish. These ducks are strong swimmers and will dive for protection, but they are uncertain and awkward on land.

Diving and dabbling ducks: In these types of ducks depend fed on nutrition from the ground and sometimes dive into the water to find food, but do not dive for long periods under water like diving duck.

There are other classification depends on the behavior, such as

Perching ducks: Any of the species of the tribe Cairinini, family Anatidae (order Anseriformes), waterfowl that typically inhabit wet woodlands, nest in holes in trees, and perch on branches by means of their long-clawed toes. The tribe is widely represented, especially in the tropics.

Sea ducks: A group of ducks keep much of its life in the water does not touch the land except for a few periods when mating and lie on the eggs and includes the types of diving duck like *Aythya* and fish duck like *Mergans*

Scientific classification duck

Kingdom: Animalia

Phylum : Chordata

Class : Aves

Order : Anseriformes

Family : Anatide

Sub- Family

Anatinae

Anserinae

Aythya

Dendrocygninae

Merginae

Oxyurinae

Plectropterinae

Stictonettinae

Tadorninae

Thalassorninae

Genus : 42 Genus

Species : 107 Sp

Sub Species: 137 Sp

Sub- Family Anatinae

There is in this family 15 genus

- Anas (18sp)
- Amazonetta (1sp)
- Lophonetta (1sp)
- Speculanas (1sp)

- Chelychelynechen (1sp)
- Thambetochen (2sp)
- Ptaiochen (1sp)
- Aix (2sp)
- Cairina (2sp)
- Callonetta (1sp)
- Chenonetta (1sp)
- Pteronetta (1sp)
- Nettapus (3sp)
- Sarkidiornis (1sp)
- Tachyeres (4sp)

Sub- Family Anserinae

This family includes 6 genus linked to goose not duck

Sub- Family Aythyinae

There is in this family 3 genus

- Marmaronetta (1sp)
- Netta (4sp)
- Aythya (13sp)

Sub- Family Dendrocygninae

There is in this family one genus

- Dendrocygna (8sp)

Sub- Family Merginae

There is in this family 11 genus

- *Chendytes* (1sp)
- *Polysticta* (1sp)
- *Somateria* (3sp)
- *Histrionicus* (1sp)
- *Camptorhynchus*(1sp)
- *Melanitta* (5sp)
- *Clangula* (1sp)
- *Bucephala* (1sp)

- *Mergellus* (1sp)
- *Lophodytes* (1sp)
- *Mergus* (5sp)

Sub- Family Oxyurinae

There is in this family 4 genus

- Oxyura (5sp)
- Nomonyx (1sp)
- Biziura (1sp)
- Heteronetta (1sp)

Sub- Family Plectropterinae

this family includes one genus linked to goose not duck

Sub- Family Stictonettinae

There is in this family one genus

- Stictonetta (1sp)

Sub- Family Tadorninae

There is in this family 6 genus

- Tadorna (7sp)
- Salvadorina (1sp)
- *Merganetta* (1sp)
- Hymenolaimus (1sp)
- Malacorhynchus (2sp)
- *Pachyanas* (1sp)

Sub- Family Thalassorninae

There is in this family one genus

- Thalasseri's (1sp)

Scientific classification for domestic duck

Kingdom: Animalia

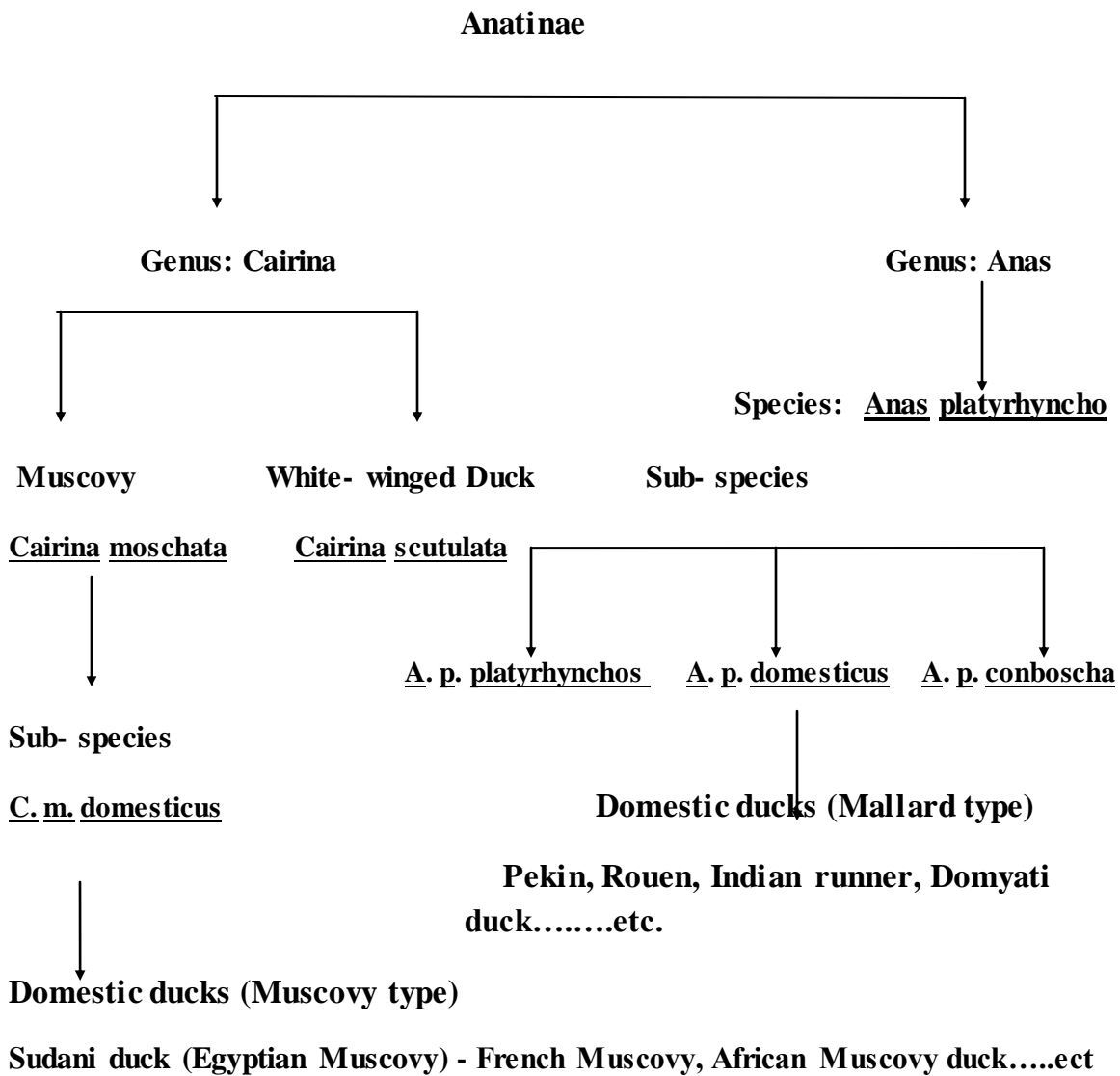
Phylum : Chordata

Class : Aves

Order : Anseriformes

Family : Anatide

Sub- Family: Anatinae



Domesticated ducks

Through scientific classification of domesticated ducks note that domesticated ducks is divided into two types of ducks, first, Mallard ducks (Anas platyrhyncho), second, Muscovy ducks (Cairina moschata). The differences between the types of Muscovy and Mallard can be summarized in the table (1)

Table (1): show a comparison between the types Muscovy and Mallard ducks

Muscovy ducks (<u>Cairina moschata</u>)		Mallard type (<u>Anas platyrhyncho</u>)
1	Found red facial skin face	No red facial skin face
2	It has a low voice	It has a loud voice especially the females
3	There claws in the legs	No claws in the legs
4	Growth of the body is horizontal	Growth of the body is vertical
5	Incubation Period is 32-35 day	Incubation Period is 28 day
6	Low fat content in carcass	High fat content in carcass
7	Difference in the size of the chromosomes	

Mallard ducks

Characterized Mallard strains in fast growth and high egg production where there is productive strains of eggs such Khaki Campbell and meat production strains such as Rouen and Aylesbury and other for meat and egg productive like Pekin duck, there are more than 125 around the world breed of domesticated Mallard breeds (photo 1).

Mallard types in Egypt

Mallard strains duck can be divided in Egypt into commercial and local strains duck

Commercial Mallard duck



Alabio



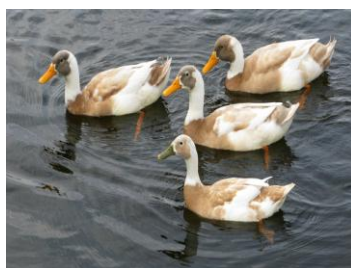
Aylesbury



Chara-Chemballi



Cayuga



Desi



French Pekin



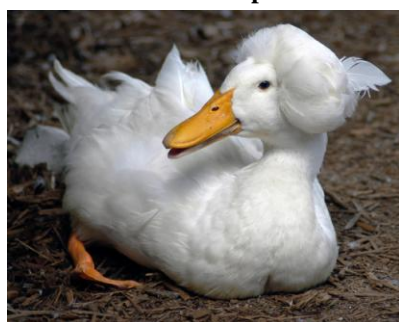
Khaki Campbell



Indian Runner



Tsaiya



Crested



Domyati



Rouen

Photo 1: Type of Mallard duck (Anas platyrhynchos)

In Egypt there are two strains of commercial ducks, Pekin and Khaki Campbell ducks.

Pekin duck

There are many breeds of Pekin ducks in the world similar in phenotypic character but differ in productive performance like, e American, German, Ukrainian and French Pekin duck in addition to the lines and breeds of Pekin ducks found in China. The strain reared In Egypt is the French Pekin duck.

Characteristics of Pekin duck

- 1- Color feathers white, beak and legs in color orange
- 2- Body weight from 2600-3350 gm.
- 3- Eggs number from 200-230 and egg weight 60 gm.
- 4- Rears for the purpose of cross with Muscovy to produce Mulled duck.
- 5- Rears for the purpose of meat and egg productive.

Khaki Campbell duck strain

The Khaki Campbell is a breed of domesticated duck that originated in England and is kept for its high level of egg production. The breed was developed by Mrs. Adel Campbell of Uley, Gloucestershire, England at the turn of the 20th century. The "Campbell Duck" being introduced in 1898 and the 'Khaki' variety introduced to the public in 1901. The Khaki Campbell is various mating of Rouen, Indian Runner and Wild Duck were resorted to produce them. The resulting birds were prolific layers.

Characteristics of Khaki Campbell duck

- 1- Color feathers brown, khaki and white, but the white not found in Egypt
- 2- Body weight from 1360-2680 gm.
- 3- Eggs number from 300-320 and egg weight 65 gm.

5- Rears for the purpose of egg productive and males for meat productive

Local Mallard duck

There are two strains in Egypt of local ducks, Domyati and Shershery ducks.

Domyati duck

The Domyati duck is local strain in Egypt its similar to wild Mallard duck in phenotypic with two different, the first, is the Domyati duck cannot fly, the second different, there is white color in some parts in the Domyati females

Characteristics of Domyati duck

- 1- Color feathers brown in males with green head and the female brown with white color in some parts in body
- 2- Body weight from 1500-1750 gm.
- 3- Eggs number 170 eggs.
- 4- Rears for the purpose of meat productive.

Shershery duck

The Shershery duck is the most widespread strain in in Egypt compared to Domyati duck.

Characteristics of Shershery duck

- 1- Color feathers brown, black, white and gray
- 2- Body weight from 2500-3000 gm.
- 3- Rears for the purpose of meat productive.



Photo 2: Shershery duck

Muscovy ducks

The Muscovy duck (*Cairina moschata*) is distinctly different genetically from common ducks (Mallard ducks). This breed is believed to have originated in South America, although ancient records of this or a similar breed have been found in Egypt. The Sudani can be considered as a line from Muscovy found in Egypt. There are both colored and white feathered varieties of Muscovies. Unlike common ducks, the head and face of Muscovies is covered with caruncles (a fleshy growth that resembles wattles). Another prominent feature of Muscovy ducks is the large difference in body size between the drake and females, the male weighing 30-50 % more than the female. Muscovies tolerate hot weather much better than common ducks. Muscovy eggs require about 35 days hatching. While Muscovies can be crossed with common ducks, their offspring's are sterile.

Muscovy Strains duck in Egypt

Mallard strains duck can be divided in Egypt into commercial and local strains duck

Commercial Muscovy duck

In Egypt there is one strain of commercial Muscovy duck ducks.

French Muscovy duck

The French Muscovy is the local strain in France. Muscovy was established at the Duck Research Center DRC in 1984 from 80 eggs donated by a French farmer and was then selected to improve the growth performance.

Characteristics of French Muscovy duck

- 1- Color feathers white, black, barred, pied and piped.
- 2- Body weight from 2600-3000 gm for females and 4000-6000 gm for males at 10 wk of age.
- 3- Reared for the purpose of meat production.



American Muscovy



African Muscovy



Barbarie (Black)



Fayoumi duck



Sudani duck



White Muscovy



Lavender Muscovy



Silver Muscovy



Barred



Chocolate Muscovy



Bronze Muscovy



A Turtle Dove

Photo 3: Type of Muscovy duck (*Cairina moschata*)

Local Muscovy duck

There are two strains in Egypt of local ducks, Sudani and Fayoumi ducks.

Sudani duck

Sudani duck one of the popular birds in Egypt. Sudani duck has many names in Egypt like native duck or Egyptian Muscovy. They have lower growth performance, although, Sudani ducks have higher carcass quality and immune response.

Characteristics of Sudani duck

- 1- Color feathers black
- 2- Body weight 1828 gm for females and 3037 gm for males at 14 wk of age.
- 3- Eggs number 80-120 eggs.
- 4- Rears for the purpose of meat productive.

Fayoumi duck

The Fayoumi duck found in Fayoum governorate in Egypt in 2010 and still under study

Characteristics of Fayoumi duck

- 1- Color feathers white and max between black with white.
- 2- Body weight 2100 gm for females and 3600 gm for males at sexual maturity.
- 3- Rears for the purpose of meat productive.



Photo 4: Picture for Fayoumi and Sudani, the left is Fayoumi and the right is Sudani duck

Sterile Hybrid Ducks

When Muscovies and common ducks are allowed to mate naturally, the fertility rate is usually very low. It is a common practice today to use artificial insemination to increase the fertility. Whatever the method of mating, the offspring are sterile and cannot be used for breeding. These hybrids are usually raised for their meat, or in some cases, for their liver (foie gras), which is a delicacy sold in famous restaurants. These sterile hybrids are called mule ducks (Muscovy male x common female) or hinny (common male x Muscovy female) ducks. In some cases special names are assigned to hybrids by commercial breeders. For example, once hybrid produced by crossing Muscovy males with Pekin females is called “Mulard”. Such names may identify the commercial breeder and the particular strain of Muscovy and common duck used to produce the hybrid. In Taiwan, the hybrid produced by crossing a White Muscovy male with a Kaiya (Pekin x Tsaiya) female is called simply, the “Mule Duck”. Mule Ducks are popular among the people of Taiwan because of their taste and high proportion of lean meat.



Mule duck ((Muscovy male x common female)



Hinny duck (common male x Muscovy female)

Photo 5 Type of Mulard duck (mule or hinny)

Hybrid ducks in Egypt

In Egypt, we can find four hybrids in ducks, also can be divided into hybrids commercial and local as follows

Commercial hybrid ducks in Egypt

There are two hybrid ducks in Egypt, Germoh Mulard and Pelnshar Mulard ducks

Germoh or Messenger Mulard duck

This hybrid comes from mating between French Muscovy male duck with Pekin females duck and the name Germoh or Messenger back to the company that produced.

Characteristics of Germoh or Messenger Mulard duck

- 1- Color feathers black, white with black spot on the head, Light and dark brown and the combination between the White and Black
- 2- Body weight 4000-4500 from 8-10 wk of age
- 3- Reared for the purpose of meat production

Pelnshar Mulard ducks

One of the types of Mulard ducks which has spread in recent years in Egypt. But it is unknown the parents lines, however, certainly the males will be the French Muscovy

Characteristics of Germoh or Messenger Mulard duck

- 1- Color feathers white with red eyes
- 2- Body weight 4000-4500 at 8wk of age
- 3- Reared for the purpose of meat production



Photo 6 Germoh or Messenger Mulard duck.



Photo 7: Pelnschar Mulard duck.

Local hybrid ducks in Egypt

Their two hybrids from Sudani duck (Egyptian Muscovy) in Egypt, PS and MS cross. These hybrids come from Sudani duck or Egyptian native breeds of ducks because they are able to adapt to a wide range of environmental conditions, which may be the reason for the increasing importance, and popularity of the duck industry in Egypt. Sudani duck one of the popular birds in Egypt. They have lower growth performance, although, Sudani ducks have higher carcass quality and immune response. On the other hand, Peking ducks grow rapidly, reaching approximately 90% of their adult weight at 7 weeks of age. While, Muscovy ducks in particular is a heavy breed mainly used for meat production. Modern commercial ducks grow faster due to genetic selection, efficient rearing system and improved nutrition supply. But, selection for fast growth and high yield may adversely impact the functional and genetic disease. Although, lower immunity has been predicated along with selection progress. The cross between commercial duck and Sudani duck improves the carcass quality and immunity compared to commercial duck.

PS cross

This hybrids produced by cross between Pekin duck males with Sudani duck females

Characteristics of PS cross

- 1- Color feathers Light and dark brown and the combination between the White and Black
- 2- Body weight 2765gm at 9 wk of age
- 3- Rears for the purpose of meat productive

MS cross

This hybrids produced by cross between French Muscovy duck males with Sudani duck females

Characteristics of MS cross

1- Color feathers Black, white and the combination between the White and Black

2- Body weight 2660gm at 10 wk of age

3- Rears for the purpose of meat productive



Photo 8: MS cross duck at different ages.

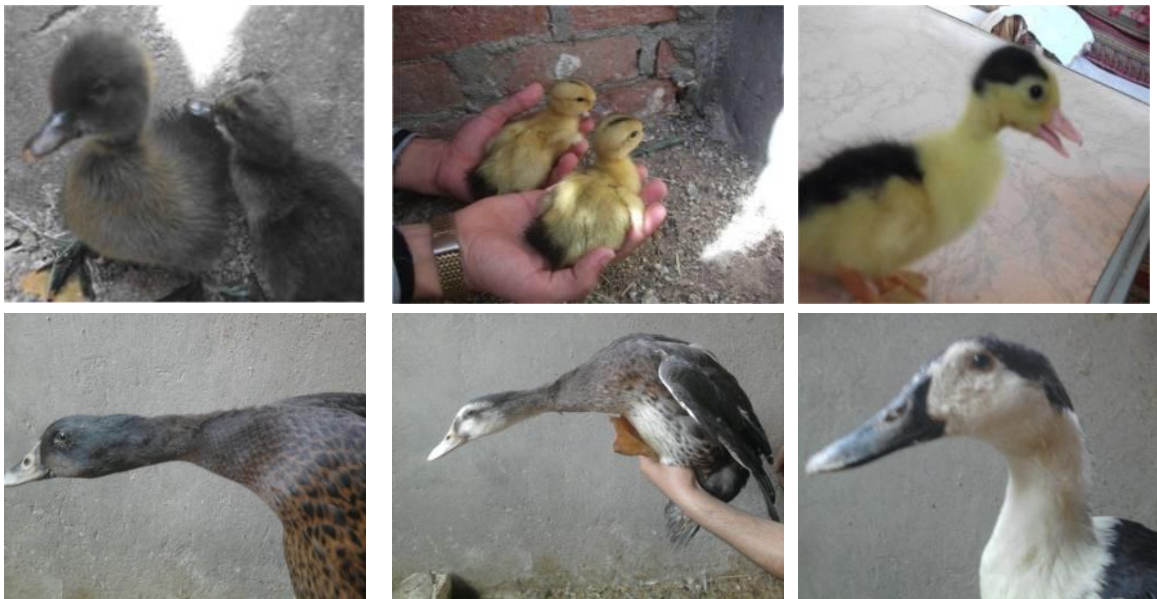


Photo 9 PS cross duck at different ages.

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External links

- [Mallard at RSPB's Birds by Name](#)
- [Northern Mallard at Birds in Backyards](#)
- *"Mallard media". Internet Bird Collection.*
- [Mallard Species Account](#) – Cornell Lab of Ornithology
- [Mallard photo gallery](#) at VIREO (Drexel University)

https://en.wikipedia.org/wiki/Muscovy_duck