A note on Balkan sheep breeds origin and their taxonomy

C Drăgănescu

National Research-Development Institute for Animal Biology and Nutrition,
Calea Bucuresti nr.1, 077015 Balotesti, Ilfov, Romania

“An understanding of the Vlachs culture and its origins is important for the study of pastoral life in the Balkan Peninsula”
Matley (1968)

A correct breed identification, nomenclature, and classification are a sine qua non basis of an efficient Animal Genetic Resources management (improvement, conservation, utilization). For some objective, but also subjective reasons, many errors persist in this field. The same name is given to different breeds (Tsigai to Tsigai and Ruda), a breed have different name (Corkscrew horn Walachian have some six names), the breeds origin and their phyletic group confused (the Walachian breeds named Zackel-the name of O. paleoeigyptica breeds), a.s.o. Practically it does not exist a correct phylogenetic breed classification. Draganescu (2006) underline that Farm animal taxonomy is now in a paradigm crisis, and proposed as a solution de zoological approach, a diagnostic key for breed identification and 3 suggested cladograms for the breeds of Balkan area. An attempt of EAAP (Simon 1993) to classify European breed by similarities, and to introduce also an international nomenclature was practically not continued by FAO, who overrate de efficiency of present molecular approach and underestimate the classical zoological taxonomical approach. Our attempts (1994-2006) to make some phyletic classification are just partial, reflecting some interesting aspects as least for us.
Certain sheep phyletic group from the Southeast European area (Tsigai, Ruda, Corkscrew Walachian, some Walachian) has a Roman origin and some of them are far large extended than the border of former Roman Empire. In 17 gourberies of the former Russian Empire, from Bessarabia to the Ural and North Caucasus some or the main local breeds use to be the Walachian and Tsigai breeds - (Ivanov 1923-1950, Dragansecu 1997-2006). We considered disputable if the Slaves, and the Hungarians ancestors bring sheep with them, and if Illyrians and Greeks ancestors were a sheep or goat breeders.

As the breed’s taxonomy seems to be more complex, have many unsolved complication and mysteries aspects, we continue the sheep breeds taxonomy investigations in S-E Europe region. In this paper we will try to (1) identify some aspects of the breed formation process in this area, (2) the connection between the Balkan native sheep breeds and the former Roman and Romanized population, (3) some examples of still unclear identified, descript, denominated or classified native sheep breeds in Balkans.

1. Native breed formation and the Romanised population of Central and South Eastern Europe.

Most old, indigenous breeds of livestock arose also, as Lush (1960) stated, by community breeding in small region, where small human society (band, tribe) isolated, selected and reproduced their animals. The existence of such conditions in Central and South-Eastern Europe, the existence of small traditional societies can be an explanation of apparition of many native sheep breeds in this area.

It is the case of descend from the former Roman and Romanized society, malicious named by new Byzantine power and by new immigrants Vlachos or Valachs, and possible by the descend from former Thrakiana and Ilirian populations.

Fig. 1. Society's evolution of the Roman and Romanized population from the former East Roman Empire. (Draganescu 2007). Most of theirs native sheep breeds started their formation during the Roman Empire and evolved during the bands, tribes and possible chiefdoms societies.

** Societies types accepted from Diamond (1999) classification
The Romanized population from the former Roman East Empire, had to leave the history on 7-th century, when the official imperial language was changed from Latin to Greek (641 year), and most of peninsula has been occupied by Slavs. (Fig. 1) They retired for many centuries from the stately, „imperial” social organization to a bands and tribal life. That can be an explanation of script material absence on them, who permitted many historical speculations.

The former Romans settlers and Romanized natives, have managed to exist through the centuries, as Matley (1968) stated, “almost exclusively by herding of livestock on mountain pasture In fact, so strong has herding become associated with the Vlachs that in part of Greece the term vlahos is used to denote a shepherd” vlachostrata to denote transhumance routes,” “with no ethnic connotations. Since the Middle Ages the vlah has been used in Serbia and Bosnia as synonymous with mountain herder of any ethnic group”. “The survival of former Romans in these circumstances seems something of a miracle”, noted Winnifirth (1985), “and perturbed the “national” historians of this part of Europe. A large amount of “historical” studies are dedicated to them”. Seldom the transhumance was confounded by chance or deliberately to nomadism or to migration, their territorial location and even presence contested. Winnifith (1985) however concluded “It seem not to rash to guess than the Vlachs in the absence of any evidence to the contrary may have lived in the same way and in the same place for the previous fourteen hundred years” The transhumance, imposed by the mountains conditions (not possible to have forages for wintering in mountains), made possible the breeds dispersion and the tribal relations, but also the pasture disputes (the case of Vlahs and Saracatsans).

Generally each territorial community formed his breed. The name of breed was connected to the name of community (Valachian, Vlahico etc) or to some breed characteristics (Corkscrew horns, Ruda from Aruda = fine soft wool, Tsigai = fine soft wool). With such nomenclature systems, who practically presented a short handled standardized descript of breed, was easy to identify it and his relationship to others breeds. However the history complicates the problems.

Ages, as Matley (1968), Malcom (1996, 1999), Winnifrth (1985) noticed, “most of the Romanized and Latin-speaking population had become spontaneously or deliberately assimilated with the surrounding others nationalities, but in spite of losing their language they still maintained the old way, pastoral of life” and their breeds. As a result of Vlachs assimilation, was seldom changed, by chance, or by, an unjustified “national proud”(the language and the ethnicity are different things and must not be confounded), also the breed name. It is symptomatic that on many borders sides of Balkan countries (Albania-Greece, Bulgaria-Serbia a.s.o.) there are seldom breeds with different name, even the borders are just from the 19-th century and the breeds use to be the same on both side of the border. Now
the breeds name do not reflect, with some exception, their characteristic, phyliation, relationship, and that is a damage for a cooperation in their improvement, conservation, utilisation.

2. The SE European phyletic native group of breeds.

„The names, Tsigai for this fine-wolled breed, Tsurcana for coarse-wolled sheep and Stogosch for the cross between them, which are retained in Romania today, were used in Bulgaria as early as the eighteenth century”
Savov (1959) quoted by Ryder (1968 p177)

In Balkan Peninsula and in neighbor countries we identified before 2006 year some 5 phyletic groups of sheep breeds. In 2006 we noticed two more. Sure that is more or less a scientific supposition susceptible to be corrected. This six group and their main identifiable characters are the following

§ **Tsigai**, transhumance and sedentary breeds, related to Merino, initial the breed of Carpathians Bend Romanian transhumance shepherd, perhaps descend of some Roman colonized there. They have white wool, dominant to black (as Merino), brown, reddish or white face and legs. His name is a strict Romanian word, meaning soft, fine wool. (in Romania some 20% of sheep, 1.9 million, are Tsigai).

§ **Ruda**, more sedentary breeds, related to Bergamasca introduced perhaps by Romans in more plain area of Balkan Peninsula. Seldom confused to Tsigai (Serbia, Croatia, even Hungary) or to Valachian (erroneous named “Zackel”). Generally have white wool with black face and legs. We note that the Aromanian word ruda (aruda) is the synonym of Romanian word tsgai meaning soft fine wool. Have a different conformation (lopped ears, Roman nose) and a larger weight than Tsigai and Valachian.

§ **Corkscrews horns Valachian (the correct “Zackel”),** is a sedentary group of breed related to former **Egyptian corkscrew horn sheep**, and to the Uda breed of West Africa (Ryder 1968). Was named by Buffon (1780) and Darwin (1865) “Valachian”, By Linneus (1762) *O.a.strepsiceros*, by Cornevin (1890) “from Montenegro (there is a breed from this group-Baluja). Nathusius (1890), translating the Linneaus name-of the breed-O. a. strepticeros into German and named it Zackel (strepticeros=zackel). The Hungarians and even the Romanian scientists named it “Ratska”- (the Romanian peasants name it Serbian, really the term Rack, meaning Serb). However Serbs keep sometimes their correct name “Valaska vitorioga”, even there are some tentative to change it to Vitoroga Zackel. The breed is still conserved by Romanian peasants on the Romanian-Romanian borders, in Serbia and very well in Hungary, sometimes as a “Hungarian historical breeds” (Draganescu
It seems that is the sheep of a former Roman legion brought to the area from the Middle east-Egyptian area, legion who survived there as a band or tribe until the 17-18th century, being gradually Serbicized, or Hungarcized. We mention as Malcom noted that, that “In the late fifteenth century there were at least 35 000 Vlachs in Herzegovina, and in the sixteenth century as many as 82 692 many Vlachs in Smedevo region, to the south of Belgrade”, even “for a time Belgrade was almost a Vlach city”

§ **Valachian I**, is a mixed wool (70-80 % fine and medium fiber ¬ 20% kempts) transhumance, pendular or sedentary breeds, **erroneous named up to now Zackel** (on most country named Valachian, and in any county not denominated Zackel). It is originated, perhaps, from old Scythian and Thrachian sheep, but possible also from the early West European mixed wool sheep (Draganescu 1994, 1997). It have a white wool, recessive to black, with different color on face and legs.

§ **Vlachian II (kempt wool?!)** similar morpho-physiologically to Valachian I, but having in our impression more or just coarse wool (over 70% kempt, as Corkscrews horns Valachian).

§ **Fat tail or Ramp breeds**, who penetrated from Asia Minor

§ **Italian and Austrian** breeds who penetrated in Slovenia and possible in parts of Adriatic border

Simon (1993) discerned, under the name of EAAP commission, eight group of similar sheep breeds in Europe. Tsigai and Zackel were classified as subgroup of Mountain Sheep; Ruda and Corkscrew Valachian were included generally in “Zackel” subgroup. FAO didn’t make up to now any classification. Mason (1988) noticed Ruda as possible distinct “type”, but included in it not always clear Ruda breeds.

Concerning the breeds identification, we noted that, as a result of the traditional community breeding, the Romanian sheep breed and perhaps many local Balkan breeds, has an island structure, with easy visible different emergent breeds.

As a result of continuous change in breeding objectives, of crossing schemes over the last fifty years, the size of native breeds of decreased in many countries. However is difficult to accept that as a justification of present confusions in breeds nomenclature and inventory, and to underestimate that the native breeds are the best adapted to the Balkan marginal land, to economical management.

3. **Breeds dispersed from Romania to other Balkan countries**

From the present Romania, some sheep breeds have been dispersed on south, over Danube, and on vest to Serbia-Bosnia.

The breeds passed the Danube by transhumance and by sold to Turkish. Constantinesu-Mircesti, (1976) found customs hours data from de beginning of 19-th years who attest a systematic and massive Danube passage by Romanian transhumance flocks. Generally the Romanian mountains transhumance
shepherds use to establish some of them on the winter pasture, to maintain them for the futures years. Even now they do that. That is the explanation of existing of Staroplaninski Tsiga on North Bulgaria, and perhaps of others not clear identified Valahian („Zackel”, Tsurcana) breeds in this area. Svistov was one of them, but as the breeds name was changed, now it is difficult to establish the breeds’ relationship, to make a taxonomical classification. On the past the fact was attested by Savov (1959) quoted by Reder (1968), and by Ganceff-(1922, 1930), quoted by Holevici (1933). At least the North Balkanian mountains sheep breeds were named up to some 1900 year Tsurcana and Tsigai. Sure these populations evolved more or less independent, but their phyletic group must be maintained in nomenclature, as in the case of Staroplaninski Tsigai. We not that Staroplaninski Tsigai is somehow different of Romanian. Generally the Romanian Tsigai have brown faces or legs (Brasov), reddish (Covasna) or white (SE Romania). The Bulgarian have spotted face and legs, as a result of cross of different Tsigai, fact noted also in Romania. In South Bulgaria (Rodopski Tsigai), Albania and even Mongolia Tsigai was imported in 1950 years through the former URSS (Azov Tsigai).

Table 1 Flocks from Romanian transhumance centers, who passed Danube at Brâila, Călărași, Piuă Pietrii border points on Aug.20 - Dec.13, 1833 (Draganescu 1997, data adapted from Constantinesu-Mircesti, 1976)

<table>
<thead>
<tr>
<th>Border point</th>
<th>No flocks from centre</th>
<th>No of Sheep+goats</th>
<th>Horses</th>
<th>Donkeys</th>
<th>Workers shepherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braila</td>
<td>77</td>
<td>256598</td>
<td>1698</td>
<td>185</td>
<td>1086</td>
</tr>
<tr>
<td>Calarasi</td>
<td>61</td>
<td>95000</td>
<td>307</td>
<td>108</td>
<td>297</td>
</tr>
<tr>
<td>Piuă Pietri</td>
<td>111</td>
<td>238813</td>
<td>1781</td>
<td>264</td>
<td>1029</td>
</tr>
<tr>
<td>Total</td>
<td>249</td>
<td>590411</td>
<td>3778</td>
<td>557</td>
<td>2412</td>
</tr>
</tbody>
</table>

The Romania-Sibiu transhumance shepherds have even now a wintering place on south-west Romania, on Banat, near to Romanian- Serbian border. That is the explanation of existence of some Tsigai sheep in Serbia (not Ruda, from Sebo-Croatia and Serbo-Romania border, confounded to Tsigai), attested by Serbs as originated from Romania. That can be the explanation of Matley (1968), even of Malcom opinions that the Valachia („Zackel”) breeds from Bosnia are originated from Romania. As a result of change of breed nomenclature in the former Yougoslavia („Promenka”), it is difficult to attest their opinions and establish a breeds relationship. The Bosnian Vlasic, is clear, as Matley noted, the breed of some transhumance Vlachs, „completely Slavicized, many converted to Islam during the Turkish occupation”.

On of preferred sheep meet on Turkish sultan was that of the Romanian „Kivirdjik”, Romania Tsigai. In his Descriptio Moldaviae, Cantemir (1716), noted “Greek animal merchant carry, year by year, over 60 000 from such sheep
(denominated in Turkish chivirgic) for the sultan cuhnia (kitchen), from Istanbul, his meat being more pleasant than others, for his taste and for his digestibility”. Really during the following years were imported every year some hundred thousands sheep from Moldavia and Valahia. We Thus the Kivirdjik breed can be include on the Tsigai group of breeds, as Greek Trakian, considered as former Kivirdjik. Sure the Turks imported also Tsurcana (Valahian) sheep from Romania and possible in Turkey can be also breeds related to Valachian group.

An unsolved problem is that of so called Carnabat breed, a breed who, according to Romanian scientist who identified it (Contescu 1940), is more testy that of Tsigai. As black wool color is recessive in Tsigai, the breed was confound to Black Tsigai (Filip 1910), and we think that even now is confounded by Romanian shepherds. The name is the name of Bulgarian, town, but the present Bulgarian Carnabat it is no more Carnabat.

4. Breeds introduced into Romania from neiborouhoud countries

Beside the Carnabat breed, more or less common to Bulgaria and Romania, there are also two other breeds who penetrated to Romanian peasants from Serbia and Bulgaria: Corkscrew horns Valachian and Blackhead Ruda (Serbian Sombor Tsigai, Bulgarian Pleven Blackhead).

Corkscrew horns Valachian is the breed of some Romanian villages toward to Serb-Romania border and is conserved by them.

Romanian Blackhead Ruda, named by peasants Karabash, have a more complicate history. It was noticed in years 1912, being consider a sort of Tsigai variety (Filip 1912). Conserved by peasants against the State Breeding Plans, he was noticed by scientists just in 1985 year, when was observed that he have noting in common with Tsigai and received his correct name just in 2002 year. Perhaps it uses to be the breed of a former Romania tribe from Serbia (Sombor)-Croatia border. Perhaps Romanian, because it use the word Tsiga-Romania, nor the word Ruha-Aromanian. As the historical data demonstrate some of them passed on 17th-18th century in N-W Bulgaria (Romanski St. 1927 ) and on the beginning of 19th century in South Romania5 (Teleorman county, some 3000 sheep). In Bulgaria the breed was not confounded with their Mountain Tsigai and has been denominated Pleven Blackhead, perhaps a translation of word Karabash. In Romania passed on the beginning of 19-th century (Velich C. 1980).

An attempt to identify some breeds phyletic sheep

The main phyletic groups of Balkan countries, less related to Romania, but more to Vlach, to Aromanians, are Ruda and some Valachian breeds. The identification of these breeds is difficult. Different inventory, nationals or internationals, present usually different breeds in the same country, seldom
under a different name. Breed description is not clear, comparable. Paying attention to production systems is possible sometimes to identify the real breed name and group.

By name, the clear Valachian breeds are the Greek mountain breeds, Vlakhiko, who represent some ¼ of Greek sheep, and is divided by tribes: Arvanitovlah, Boutsiko (Epirotico), Drama Native, Epirus, Grammos, Sarakatsan, Krapsa, Moraitiko (Mason enumeration, different others). Bosnian Vlasic is presented by most inventories. Mason presented also the name Kutsovlaska, Bela Vlaskaor Karavlaasor Crno Vlaska as synonims to Karakachan, itself synonym to Sarakatze.

The name Ruda is used just for an Albanian breed and for Dubrowska Ruda, possible not real Ruda. Mason (1988) include in this “tipe” the following breeds: Luma, (Albania), syn. Gekika from Greece; Calkidiki, Katafigion, Roumloukion, Serrai (Greece); Kivircic (thrace); ruda vars of Ovce Polje, Sar Planina, Sjenica, Svrlijic (former Jugoslavia); ?Karnobat, Rila Monastery, Shumen, White Klementina and White South Bulgarian (Bulgaria). Many presented breeds are not included in national, EAAP, FAO inventories. Some of them (Kivirgik, Karnabat) are clear not Ruda. It is the duty of scientist of mentioned countries to accept or reject the Mason supposition. Some information design clear Greek Serres and Florina as Ruda breeds.

Some interesting things deservind to be analized.

§ The problems of Karakachan sheep.

Karakachan is presented as native, endangered, Bulgarian sheep disseminated on the map on all Bulgarian mountains (Balkan, Rhodopi, Pirin). Before the collectivisation practically just the transhumance shepherds used the mountains pasture. The real name of breed is Sarakatsan (sarac in Romanian=pauper) and is the breed of a transhumant Vlach tribe (some of them accept that use to be nomadic, not transhumance and non Vlach). Marinow (1961), quoted by Vuia (1964), determine that up to 18-th, beginning of 19-th century the tribe use to live in Pind mountains, with the Vlachs. During the Ianina Ali-Pasha terror some of them where obliged to migrate to Bulgarian mountains, where before use to summarize their sheep. Is interesting that in Bulgaria there were also, Vlachs, Pomaks (Bulgarian speaking Muslim) and even Yuruks (Turkish nomad), but the word Vlach or Romanian or their sheep, with the exception of Tsigai is totally absent in Bulgarian farm science literature. Celebi, quoted by Vuia related that on the years 1652-1653 some hundred thousands of sheep in 3000 flocks, (perhaps Vlach) wintering their sheep on Thesaloniky, Serres and Kavala area. “There is said to be a Vlach quarter in Sofia and a Vlach presence in the former Greek centres of Melnik and Nevrokop, now known as Gorce Delcev”. In such condition is possible that at least in Bulgarian mountains still there are some Vlach if not Romanian sheep breeds with changed name (Teteven, Kotel, Duben?). Perhaps a confusion
between Saracatsans, Vlachs, Pomaks and Yuruks, is likely to have baffled earlier investigations’

§ Karagouniko
It is a Greek breed from Tessalia, who, in our opinion present two complications: (a) His name is the name of an tribe - Karagounides (Crnogunje, perhaps Morlach, Mavrovlachos); Karagounides use to be a group of Vlach tribes from central Balkans (Serbia, Bulgaria, Macedonia northern Greece) (Malcom 1966). (b) The breed is presented as Valachian (“Zackel”), but by his development, production and possible conformation seem to be a Ruda breed.

§ Some problems of Promenca sheep.
In the former Yugoslav countries al Valachian (syn “Yougoslavian Zackel”) breeds received the Serb-Croatian name Promenka (pramen=staple or lack, hence pramenk=with open fleece, on Mason translation). For many reason that can produce confusion in breeds’ identification and classification. As was told many breeds are not Valacchian (“Zackel), some of them beeing Ruda, Corkscrew Valakian, (proper Zakel) or other phyletic group. The changed name hides the breed origin. Mason (1988) presents the breed Piva from North Montenegro, as named also Durmitor (Romanian word).

§ Transhumance and taxonomy.
Apparently, transhumance has some tendency to unify the breeds from its area. The community breeding acts against these unifying actions and the breeds are the result of this interaction. The Greek Vlachico breeds seem to be an illustration of this theory. Vlachico (some ¼ of Greek sheep)-effect of transhumance- has many sub breeds (“types”) according to different Vlach “tribes”. Maybe that is the situation with other breeds as well, but the “order” set up in the last century produced whole taxonomical disorders. Transhumance being practically practiced just by Vlach and former Vlach can give an indication about their breeds. In Greece is clear that transhumance represent some 25 5 % of production systems and the Vlahico breed some 25 % of sheep. In Albania transhumance and pendulation represent also some 25 % of production systems (Kume 2002), but it is not clear the transhumance breeds origin.

§ Is there a separation line of Romanian and Aromanian breeds?
As was noticed, Tsigai passed the Balkan mountains just been sold to Turkish, or in the last time sold from Russia to Albania and South Bulgaria. Ruda breeds passed to the North of Balkan mountain line, just under the name of Tsigai. The Romanian Transhumance did not pas the Balkans for wintering south of them. That can rise an interest problem: existed a separation line of Romanian and Aromanian sheep?
It seem that geographically, the situation leads to such weak line.
CONCLUSION
In Balkan Peninsula there are some five indigenous breeds phyletic groups and some two who penetrated by side from the neighbouring area.

The indigenous group are originated from Scitsian, Thrack and Roman time and evolved especially in bands, tribes and chieftdoms of former Romanized populations.

The native breeds have been conserved by natural selection and the natural and economical conditions of the region imposed their conservation and improvement.

The improvement, conservation and utilisation of Balkan native breeds impose a correct taxonomical approach to them. A correct taxonomical approach means a clear, standardized, short handled description, a correct binary nomenclature (national and international) who must reflect the breed characteristics and the phyletic group, a correct classification. That means an approach similar to the approach in zoological taxonomy.

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