Typology of the Conduct of the Ovine Breedings and the Habits of Antiparasitic Treatment in Algeria.

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Abstract: An epidemiological survey led in Algeria between 2007 and 2008 with 53 "leaders" breeders of ovine races of 08 departments' steppics, revealed the existence of 04 different groups of behavior of breeding, according to the month number of transhumance with regard to courses steppics local: "West"[3/9]; "Center" [6/6]; "East " [3/9]; Tiaret [0/12]. There are three periods of deworming: March (lambing of spring or depart to the transhumance); June (sheep shearing or thatches transhumance; October (autumnal lambing or on return to transhumance).

Keywords: Sheep, Steppe, Behavior of breeding, Transhumance, Habit of deworming

INTRODUCTION

In M' Sila the herds spend half of the time on the courses (mid-October to the end of May) and the other, in transhumance in the south (Djelfa, Biskra or Batna) from April to October. At This stage, two injections of endectocide (May and September) and a drogage (at the beginning of June) are practised. Tébessa is characterized by nine months of local steppe courses (March to November) and three months of transhumance towards Khenchela, Oum-El-Bouaghi or Souk-Ahras (December/February). Two drogages (March-October) and a endetocide (July) are administred

MODELING OF THE TREATMENTS

The breeders recognize in the sheep 02 types of parasitoses: endoparasitoses due to the digestive strongyloses ("Mardh El-maadna") and respiratory ("El-bounzi") and, ectoparasitoses due to the scab ("Djarab"), and the oestrose ("Timni"). The endectocides are the drugs of first intention against the ectoparasitoses and, the drenchs are reserved for the endoparasitoses. They deliberately made the "marketing positioning" of pesticides. They use 03 déparasitages in the year (Table 3): a drogage in spring (March), a endectocide in summer (June) and a endectocide or drench in autumn (October).

DISCUSSION

Although the techniques of breeding don't differ from a region to another, the conduct of the herds depends on the food availability. It appears thus, two great types of control of breeding: the sedentary breeding of the crops zones of the high plateaus (Tiaret and a part of Tébessa) and,

the semi-transhumants and transhumants breadings of the steppe areas, which use according to the food opportunities, two types of movements: the one southward further to heavy rainfall generating herbaceous zones;; and the other towards the north.

According to Galaty and collaborators (1990), these vertical movements can be completed by the horizontal ones of which the amplitude is dependent on the accessibility of the herbaceous courses and the weekly markets of cattle (Souks). During our investigation, we listed after modeling of the control of breeding, 04 groups of breeders: 03 groups (G) distinguishable by the ratio of the duration in month of transhumance over the periode of the steppe course (G1= 3/9; G2= 6/6 and G3= 0/12) and a 4th group (G4) practice the fattening in sheep-fold during 3 months and 9 months in steppe areas. These practices seem to take a regional form following bioclimatic criteria: G1=the west (Saïda/Naama/El-Bayadh), G2 = Center (Djelfa/Biskra/M'Sila), G3 = Tiaret and, G4 = east (Tébessa).

The decisions of pesticide treatments, follow initially transhumance then, can be fixed at occasion of major zootechnical events (shearing, lambing, weaning) or at the time of the preparations of sale of part of the lambs of the year, for the recombining of the herds (purchase of new genitor) and of the financial resourcing. We listed according to the habitual practices of breeders, three periods hinges of déparasitage: a first treatment takes place in 60% of the cases in March and, corresponds to the lambing of spring or the beginning of transhumances. The products used are in 70% of the cases, solutions of drogage and in 30% of the cases, they are avermectines. A second treatment takes place in 60% of the cases in June and corresponds to the shearing of the sheep or transhumance towards thatches.

The pesticides used are solutions of balneation (20%), drenches (30%) or endectocides (50%). A third treatment takes place in 70% of the cases in October and corresponds to the autumnal lambing or the return of transhumance towards the local steppe areas. The solutions used are a drench (50%) or a endectocide (50%). These practices are governed much more by habits, at best by the appearance of some cases with evocative clinical signs (fall of pruriginous wool and/or slimming) that by labotories testes realized on representative samples of the herd.

CONCLUSION

The survey carried out near 53 breeders of sheep in 08 steppe departments, reveals conduct of breedings punctuated by periods of transhumance varying from 3 to 6 months and they-even are conditioned by the food accessibility. ("Achaba" in the south and thatch in the north). These movements, generally vertical, more rarely horizontal, combined with the major zootechnical events (shearing, lambing and weaning) command decisions of antiparasitic treatment. This one, justified but not always adequate, uses two kinds of pesticides, the solutions of drogage with Benzimidazole base generally or the endectocides.

As water is rare in these areas, balneations are practically abandoned. This new approach in the conduct of the breedings and the antiparasitic of treatments of sheep sector shows clearly the acceptance of the breeders to fight chemically against the parasitic diseases. Finally, it is these types of epidemiological inquiries that it will be necessary to multiply to hope to understand factors the conduct of the breeding in steppe zone then, to refine our parasitologiqual knowledge to end in programs of reasoned fight

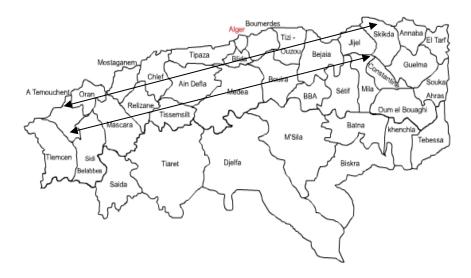


Fig 1: departments of Algeria

Groupe	J	F	M	A	M	J	Jt	A	S	0	N	D
1												
(Saīda/Naama												
El-Bayadh)												
2												
Biskra/M'Sila												
Djelfa												
3												
Tiaret												
4												
Tébessa												Ш

Fig 3: modeling of the conducts of sheep in the Algerian steppiques regions

= Steppique = Shee = thatch = Transhumance

Regions	Département	breeders			
	Naama	05			
West	El-Bayadh	06			
	Saïda	06			
	Tiaret	05			
Center	Djelfa	10			
	M'Sila	06			
East	Biskra	08			
	Tébessa	07			
Total	08	53			

Fig 2. :Visited Départements

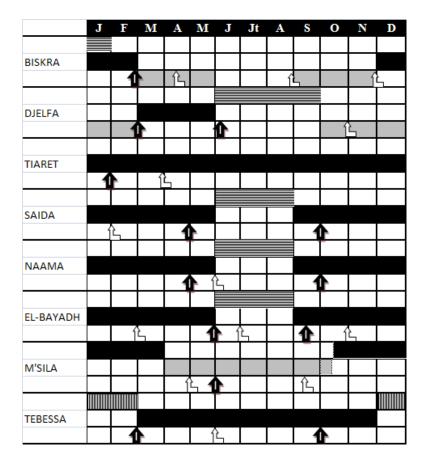


Fig 4: Typology of the breedings in the Algerian steppiques regions and treatment (processing) antiparasitic

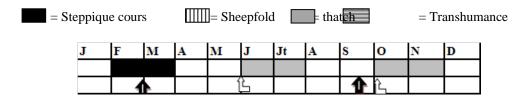


Fig 5: the modernisation (use of modern technics) of the pest control practices

REFERENCES

- **1.** AIDOUD A., NEDJRAOUI D. The steppes of alfa (Stipa tenacissima L) and their utilisation by sheeps. Plant animal interactios in Mediterrean-type ecosystems MEDECOS VI, Gréce 1992. 62-67.
- **2.** BOUKHOBZA M., L'agropastoralisme traditionnel en Algérie: de l'ordre tribal au désordre colonial. 1982, OPU; Alger, 458p.
- 3. CEVA, Santé animale « Guide de l'élevage du mouton méditerranéen et tropical » 2000. 88-89.
- **4.** GUILLERMOU Y. Le développement pastoral en Algérie : dirigisme ou laisser-faire? Cahier Sri. Hum. 26 (T-2) : 1990, 755-171.
- **5.** EIU.; Quarterly Economie Review of Algeria (Economie Intelligence Unit).KANOUN A.; KANOUN M.; YAKHLEF H.; CHERFAOUI M. A.; Pastoralisme en Algérie : Systèmes d'élevage et

- stratégies d'adaptation des éleveurs ovins, Rencontres Recherches Ruminants 2007. Paris, nº 14 : 181-184
- **6.** GALATY J.G., JOHNSON L.J., Pastoral systems in global perspective. In The world of pastoralism, Guilford Press London, 1990, pp 1-31.
- **7.** LE HOUEROU H. N.,: Bioclimatologie et biogéographie des steppes arides du Nord de l'Afrique. CIHEAM/ACCT, Options méditerranéennes, 1995, série B, 396 p. N°10.
- **8.** MAGE C., Présentation zootechnique des parasitoses en élevage ovin.1987, Point Vét., 19, 103,71-76.
- **9.** MAGE C., Immunité des moutons vis-à-vis des strongles gastro-intestinaux 2002. Journées nationales des GTV- Clermont Ferrant 2001. Ed- SNGTV.
- **10.**MOULAYE K, BOULKABOUL A., Parasitisme interne du mouton de race Ouled Djellal en zone semi-aride d'Algérie. Rev. Élev. Méd. Vét. Pays trop. 2006, 59 (1-4) : 23-29.