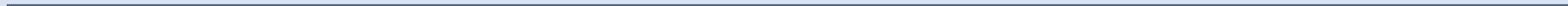




Breeding Soundness Examination



Reproduction



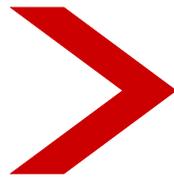
Fertility

43-60%

(35-90%)



Athletic Performance
Phenotype
Pedigree



Reproductive Performance
Breeding Features

Buck/Ram	% 80-90
Bull	% 85-90
Boar	% 85-95

Reprodüksiyon

Horse Breeding



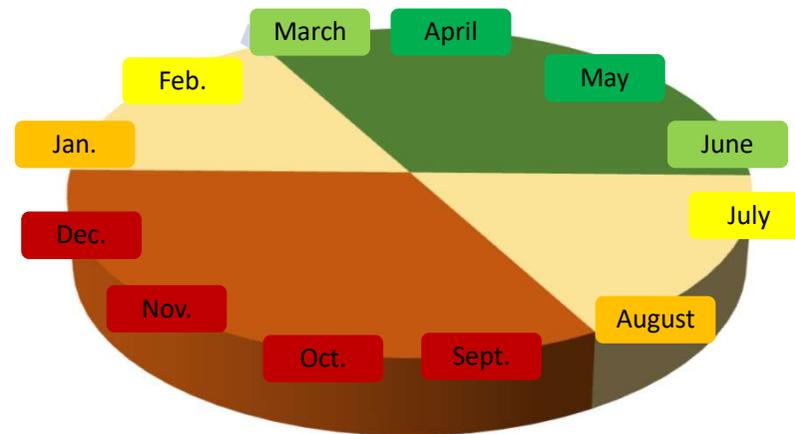
Stallion with high breeding capacity



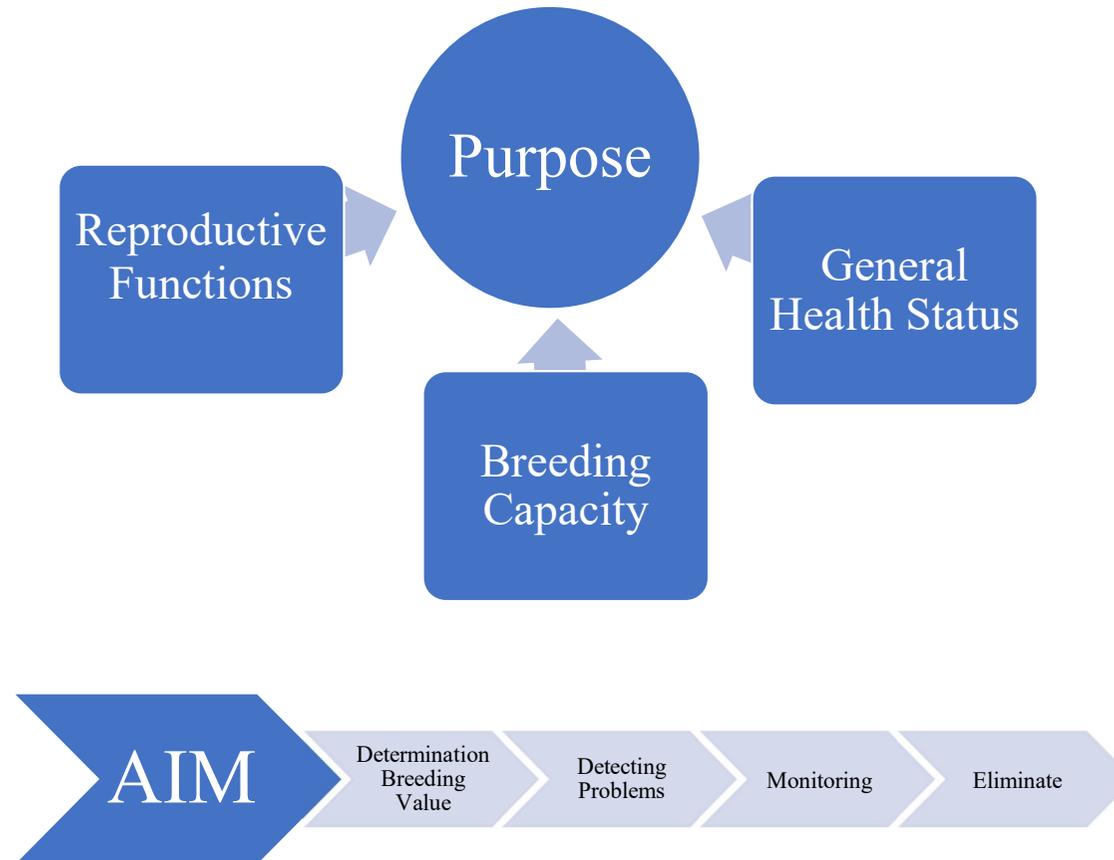
Reprodüksiyon

	Age (month)
Sexual maturity (Puberty)	12-24
Breeding maturity	24-60
First breeding age	36

15 February - 30 June



Breeding Soundness Examination



Androlojik Muayene Sistematığı

Manual for Clinical Fertility Evaluation of the Stallion

1. Recognize and anamnesis
2. General physical evaluation
3. Physical examination of genital tract Publishing **1975**
4. Microbial examination Acceptance **1983**
5. Evaluation of libido and mounting behavior
6. Semen evaluation

Androlojik Muayene Sistematığı

1. Recognize and anamnesis

Recognizing

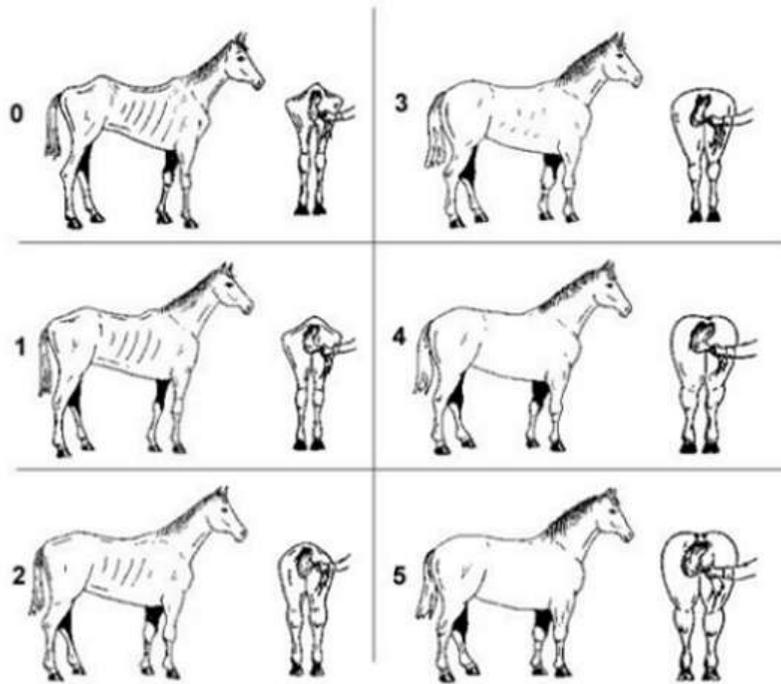
General anamnesis

Reproductive anamnesis



Androlojik Muayene Sistematığı

2. General Evaluation



BCS (Body Condition Score)



Orthopedic Examination



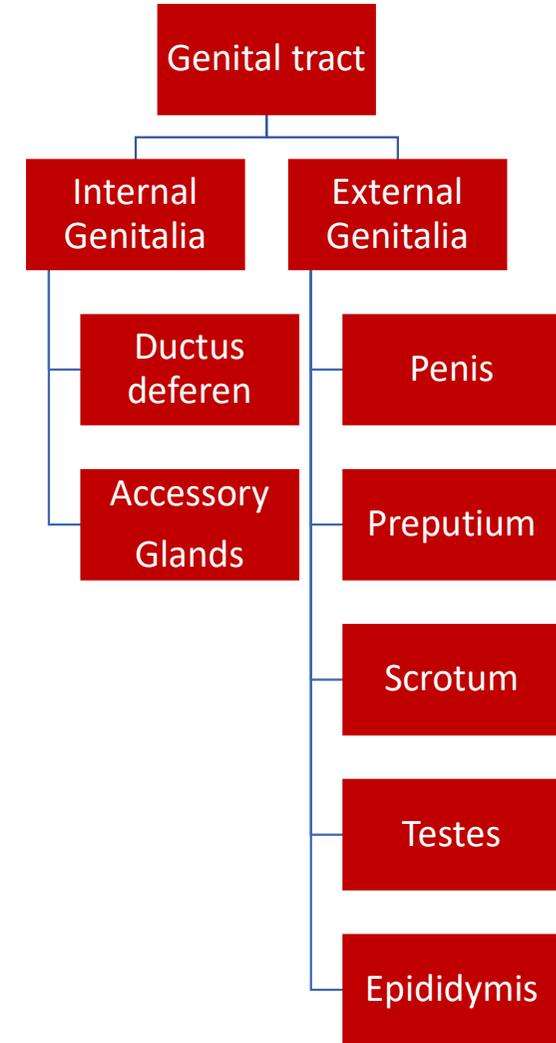
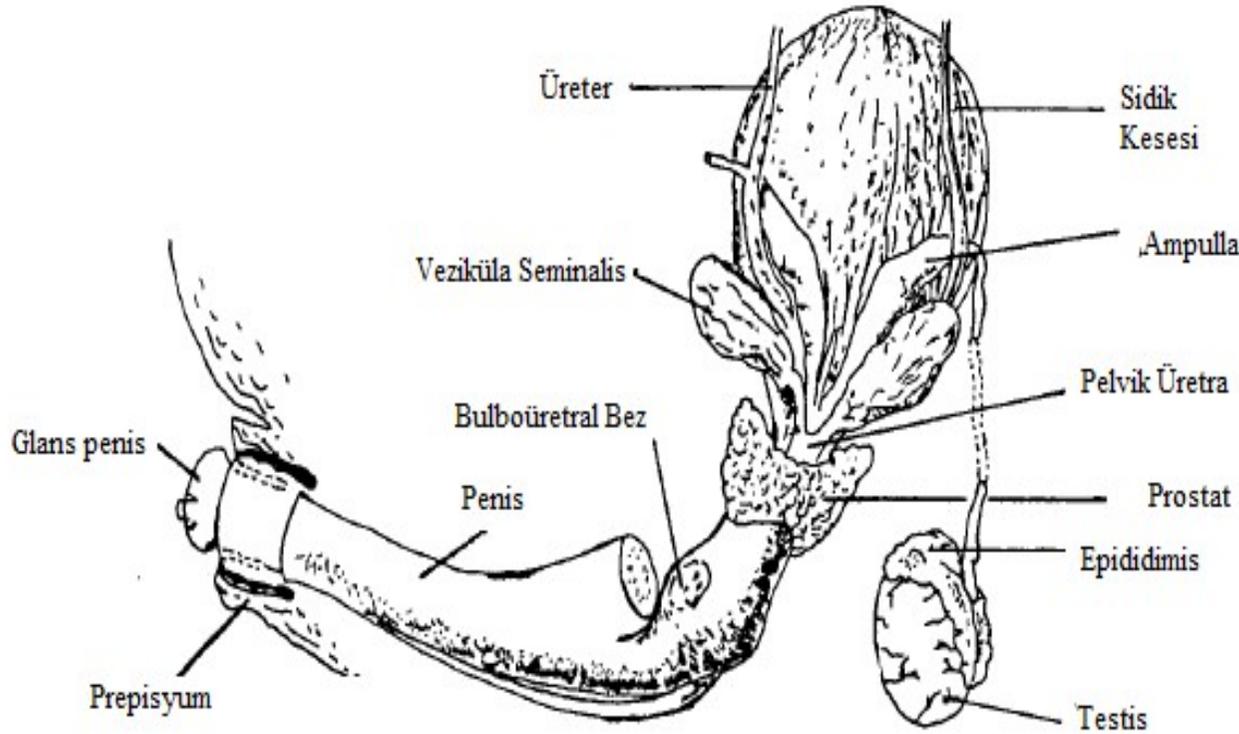
Ophthalmic Examination



Laboratory tests

Androlojik Muayene Sistematığı

3. Physical examination of genital tract



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Penis

Length: 50 cm
Diameter: 2,5-5 cm

Erection: x4



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Scrotum



Total Scrotal Width
(TSW)

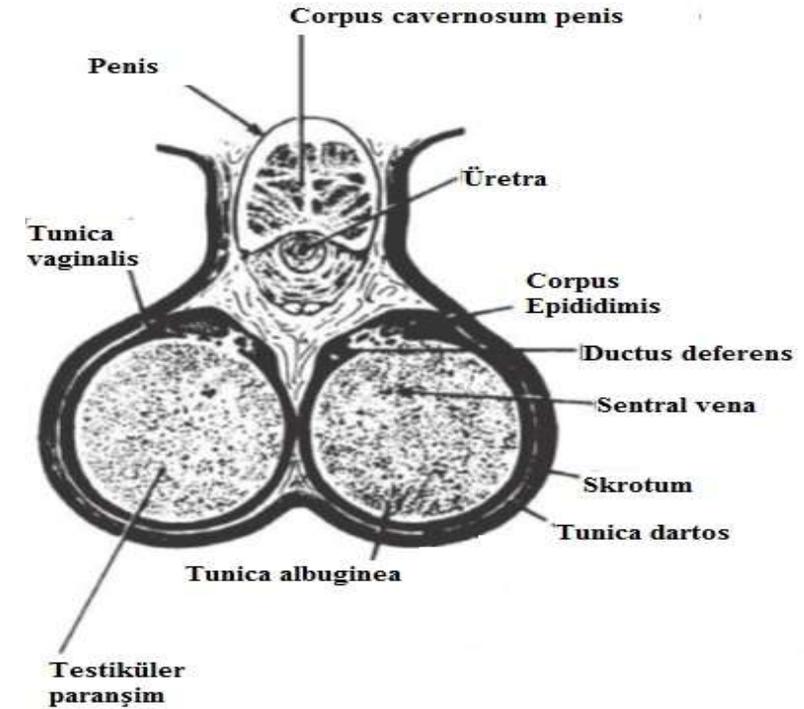
9,5 – 11,5 cm

(> 8 cm)

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Testes

Width:	4,5-6 cm
Height:	5-6,5 cm
Length:	8,5-11 cm

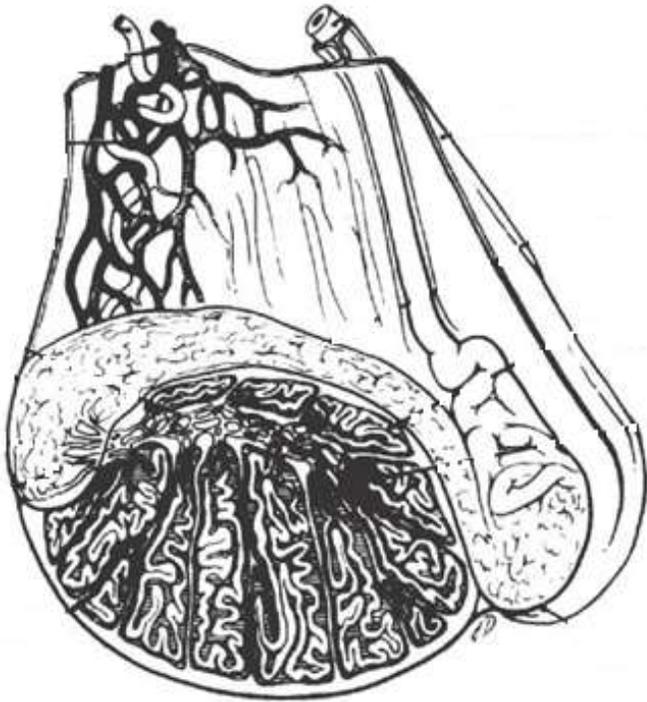


Testicular volume (TV)  Daily Sperm Output (DSO)

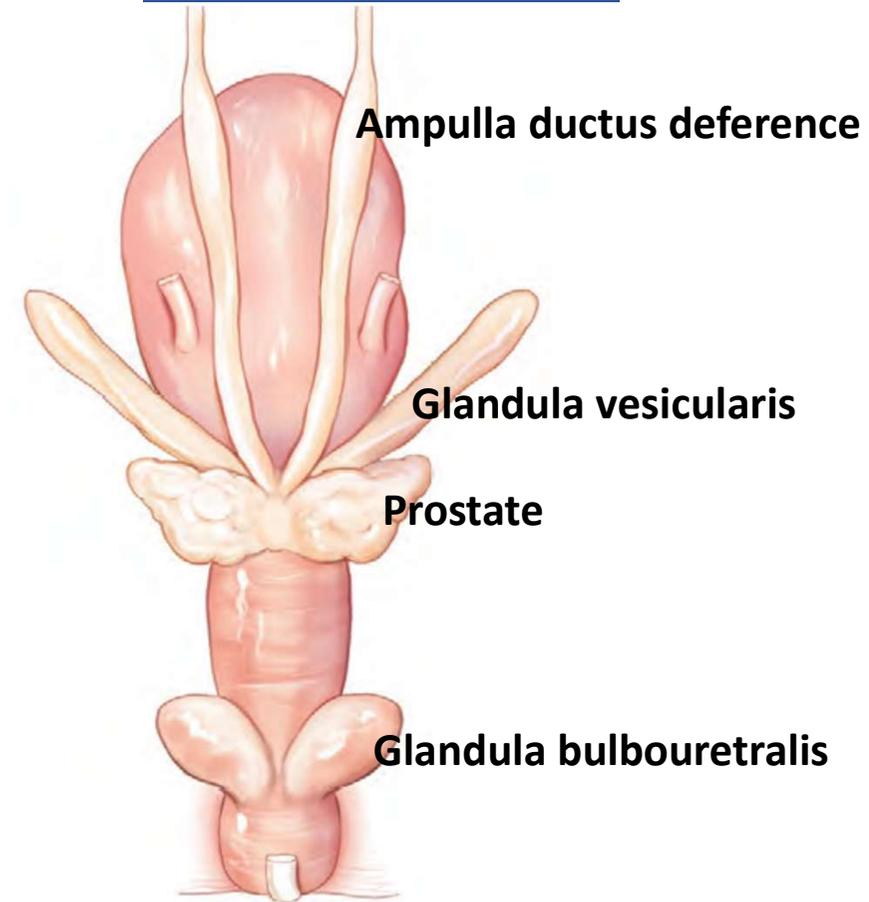
- $0,5233 \times \text{Width} \times \text{Height} \times \text{Length} = \text{Testicular Volume (TV)}$
- $0,024 \times \text{TV} - (0,76) = \text{Daily Sperm Output (DSO)}$

Androlojik Muayene Sistematığı

Epididymis / Ductus Deference



Accessory Glands



Ampulla ductus deference

Glandula vesicularis

Prostate

Glandula bulbouretralis

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4. Microbial Evaluation

- Specific infections for genital tract;
 - Testis degeneration
 - Scrotal abnormalities
 - Penil veya preputial inflamations
 - Venereal diseases

- Systemic infections;
 - General condition disturbance
 - Inflammation
 - Disruption of thermal balance
 - Infectious
 - Fatal
 - Zoonosis

Androlojik Muayene Sistematığı

5. Libido / Mounting Behaviours



Fast and intense interest in the mare
Exciting movements
Mapping
Neighing
Sniffing, biting, hitting the mare
Sniffing the mare's genital area/urine

Flehmen
Erection

30 – 60 seconds

Androlojik Muayene Sistematığı

5. Libido / Mounting Behaviours



Erection

Mounting without hesitation

Intromission

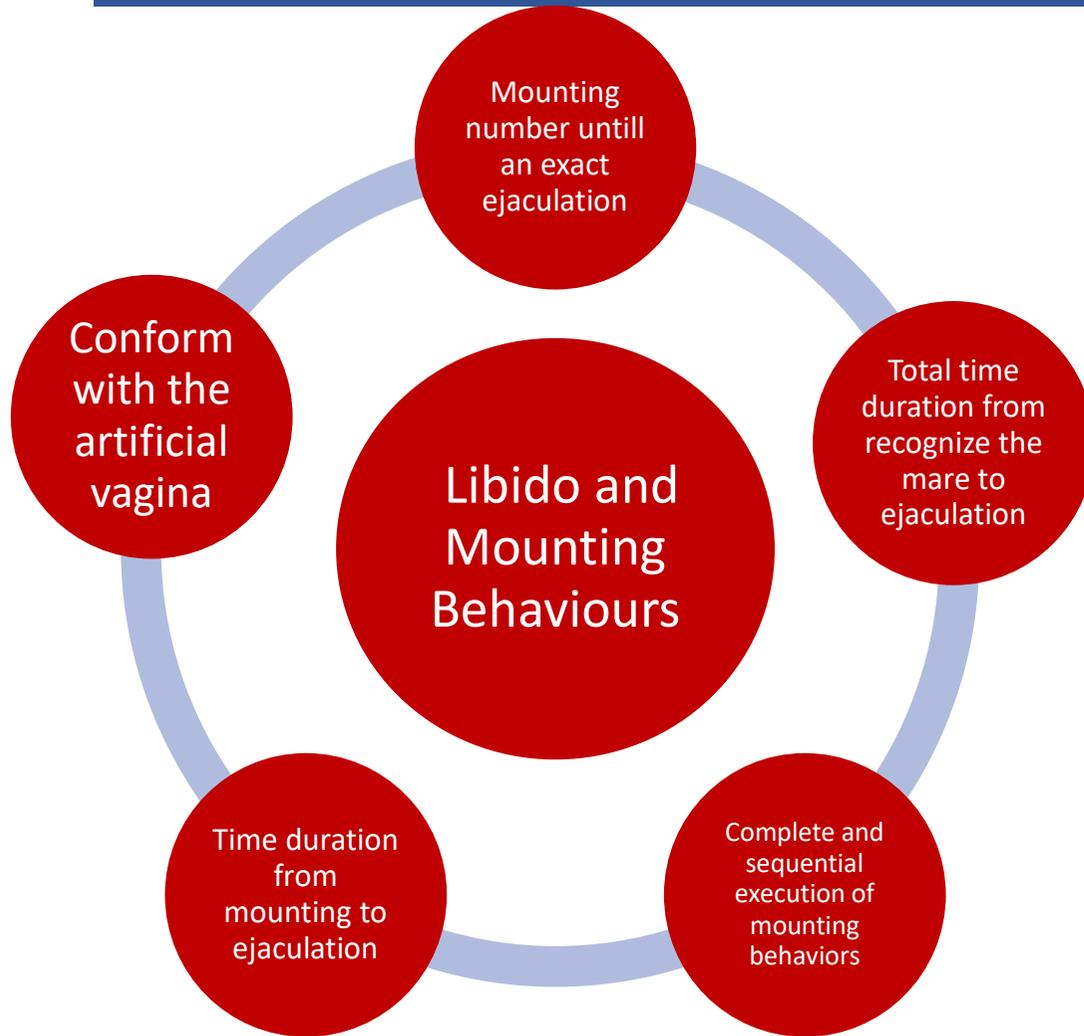
Friction

Ejaculation

Leaving

25 – 35 seconds

Androlojik Muayene Sistematığı



Libido ve Mounting Behaviours
Totally <1 min.

Evaluation; scoring in a 1-5 scale

(-1) score for each missing point

Androlojik Muayene Sistematiđi

6. Sermanın Muayenesi

• Sermanın Ön Muayenesi

- Hacim
- Renk
- Kivam
- pH

- Hacim 60 (30 - 300) ml
- Renk Düşük yoğunluk: Gri
Yüksek yoğunluk: Krem
- Kivam Düşük yoğunluk: Sulu
Yüksek yoğunluk: Koyu
- pH 7.2-7.7

Androlojik Muayene Sistematığı

6. Sermanın Muayenesi

► Sermanın Mikroskopik (İleri) Muayenesi

- Yoğunluk
- Motilite / Progresif Motilite
- Morfoloji
- Canlılık
- Plazma Membran bütünlüğü
- DNA bütünlüğü
- Kapasitasyon
- Akrozom sağlamlığı
- Oksidasyon
- ...

- Yoğunluk $4-12 \times 10^9$

9×10^9 spz/ejakulat ($200-300 \times 10^6$ spz/ml)

- Motilite >%60
- Normal >%40
 - Başa bağlı bozukluklar <%30
 - Sitoplazmik damlacık <%25

Androlojik Muayene Sistematiđi

Motilite = Hareketlilik

Progresif Motilite = Tek yönde, ileri, doğrusal ve güçlü hareket

