Clasificación

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Clasificación detallada

Factor general drenaje (D)

Función para definir el tipo textural

```python
def tipoText(Arcilla, Limo, Arena):
  Textura = ''
  if Arcilla > 0 and Arcilla < 10:
    if Limo > 0 and Limo < 14:
      if Arena > 86 and Arena < 100:
        Textura = "Arenosa"
  if Arcilla > 0 and Arcilla < 15:
    if Limo > 0 and Limo < 30:
      if Arena > 70 and Arena < 86:
        Textura = "Franco Arenosa"
  if Arcilla > 0 and Arcilla < 20:
    if Limo > 0 and Limo < 50:
      if Arena > 50 and Arena < 70:
        Textura = "Franco Arenosa"
  if Arcilla > 7 and Arcilla < 27:
    if Limo > 28 and Limo < 50:
      if Arena > 23 and Arena < 52:
        Textura = "Franca"
  if Arcilla > 0 and Arcilla < 27:
    if Limo > 74 and Limo < 88:
      if Arena > 20 and Arena < 50:
        Textura = "Franco Limosa"
  if Arcilla > 0 and Arcilla < 12:
    if Limo > 88 and Limo < 100:
      if Arena > 0 and Arena < 20:
        Textura = "Limosa"
  if Arcilla > 27 and Arcilla < 40:
    if Limo > 15 and Limo < 52:
      if Arena > 20 and Arena < 45:
        Textura = "Franco Arcillosa"
  if Arcilla > 20 and Arcilla < 35:
    if Limo > 0 and Limo < 28:
      if Arena > 45 and Arena < 80:
        Textura = "Franco Arenoso Arcillosa"
  if Arcilla > 27 and Arcilla < 40:
    if Limo > 40 and Limo < 73:
```

```
      if Arena > 0 and Arena < 20:
        Textura = "Franco Limoso Arcillosa"
  if Arcilla > 35 and Arcilla < 55:
    if Limo > 0 and Limo < 20:
      if Arena > 45 and Arena < 65:
        Textura = "Arcilloso Arenoso"
  if Arcilla > 40 and Arcilla < 60:
    if Limo > 40 and Limo < 60:
      if Arena > 0 and Arena < 20:
        Textura = "Arcilloso Limoso"
  if Arcilla > 40 and Arcilla < 100:
    if Limo > 0 and Limo < 40:
      if Arena > 0 and Arena < 45:
        Textura = "Arcillosa"
  return Textura
```

Función para obtener la conductividad hidráulica en función del tipo textural

```
def condHidra(Arcilla, Limo, Arena):
  Textura = tipoText(Arcilla,Limo,Arena)
  K = 0
  if Textura == "Arenosa" or Textura == "Franca" or Textura == "Franco Arcillosa" or Textura == "Franco
    K = 1/40 * Arena + 1/2
  if Textura == "Franco Arenosa" or Textura == "Arcilloso Arenosa":
    K = 3/82 * Arena - 135/82 + 1/2
  if Textura == "Franco Limosa" or Textura == "Limosa":
    K = 0.3/50 * Arena + 1/5
  if Textura == "Franco Limoso Arcillosa" or Textura == "Arcilloso Limosa" or Textura == "Arcillosa":
    K = 0.18/45 * Arena + 1/50
  return K
```

Ejemplo

```
Arcilla = 44
Limo = 36
Arena = 20
Textura = tipoText(Arcilla,Limo,Arena)
print(Textura)
```

```
## Arcillosa
```

```
K = condHidra(Arcilla,Limo,Arena)
print(K)
```

```
## 0.1
```