

ANEXO 1, MAPAS

Mapa 1

Ubicación del Área de Estudio



ANEXO 2, TABLAS DE DATOS PRUEBAS FÍSICAS

Tabla, 1

| MEDICIONES DE LONGITUD (cm) | | | |
|------------------------------------|----------------|----------------|----------------|
| N° | A | B | C |
| 1 | 16,760 | 14,885 | 15,395 |
| 2 | 19,400 | 15,120 | 12,585 |
| 3 | 13,290 | 14,615 | 17,375 |
| 4 | 18,700 | 18,350 | 15,175 |
| 5 | 13,300 | 19,440 | 17,560 |
| 6 | 14,050 | 13,425 | 14,035 |
| 7 | 14,680 | 22,335 | 17,160 |
| 8 | 14,310 | 15,415 | 11,485 |
| 9 | 13,280 | 13,115 | 16,700 |
| 10 | 13,170 | 13,505 | 12,635 |
| 11 | 11,610 | 14,970 | 15,700 |
| 12 | 12,200 | 14,640 | 16,090 |
| 13 | 13,080 | 12,600 | 14,620 |
| 14 | 12,610 | 11,685 | 21,625 |
| 15 | 18,410 | 15,945 | 16,915 |
| 16 | 10,115 | 12,500 | 15,410 |
| 17 | 19,050 | 20,615 | 21,630 |
| 18 | 12,595 | 20,290 | 17,050 |
| 19 | 10,585 | 20,800 | 12,425 |
| 20 | 13,550 | 14,920 | 17,555 |
| 21 | 11,415 | 12,810 | 18,795 |
| 22 | 19,290 | 17,545 | 13,315 |
| 23 | 14,860 | 20,830 | 15,135 |
| 24 | 11,940 | 19,390 | 15,085 |
| 25 | 18,165 | 16,615 | 15,245 |
| 26 | 13,125 | 15,000 | 15,410 |
| 27 | 14,650 | 18,830 | 18,910 |
| 28 | 13,100 | 19,985 | 17,415 |
| 29 | 13,280 | 11,630 | 15,410 |
| 30 | 14,010 | 14,615 | 14,130 |
| Sumatoria | 428,580 | 486,420 | 477,975 |
| x | 14,286 | 16,214 | 15,933 |
| Pro. (90) | 15,478 | | |
| Desv. (90) | 2,850 | | |

Tabla, 2

| MEDICIONES DE DIAMETRO (cm) | | | |
|------------------------------------|----------------|----------------|----------------|
| N° | A | B | C |
| 1 | 5,430 | 6,220 | 4,535 |
| 2 | 5,460 | 5,050 | 6,620 |
| 3 | 4,655 | 5,423 | 9,155 |
| 4 | 5,455 | 7,068 | 4,765 |
| 5 | 6,785 | 7,688 | 5,273 |
| 6 | 5,075 | 4,970 | 4,295 |
| 7 | 6,110 | 5,463 | 4,465 |
| 8 | 5,073 | 5,365 | 5,430 |
| 9 | 5,873 | 5,160 | 4,478 |
| 10 | 5,903 | 5,293 | 6,945 |
| 11 | 5,040 | 5,923 | 6,293 |
| 12 | 4,505 | 5,183 | 5,158 |
| 13 | 4,833 | 4,440 | 4,020 |
| 14 | 5,375 | 4,835 | 5,883 |
| 15 | 5,520 | 6,148 | 5,020 |
| 16 | 4,743 | 5,255 | 5,335 |
| 17 | 6,210 | 6,853 | 4,835 |
| 18 | 4,690 | 7,633 | 5,550 |
| 19 | 4,515 | 5,193 | 4,678 |
| 20 | 4,565 | 5,545 | 4,975 |
| 21 | 7,120 | 5,368 | 5,900 |
| 22 | 5,988 | 6,455 | 7,175 |
| 23 | 5,945 | 5,908 | 5,475 |
| 24 | 5,620 | 5,610 | 5,625 |
| 25 | 6,235 | 6,773 | 4,718 |
| 26 | 5,185 | 5,678 | 5,635 |
| 27 | 4,463 | 7,045 | 6,175 |
| 28 | 3,510 | 6,898 | 5,213 |
| 29 | 4,465 | 6,975 | 4,425 |
| 30 | 4,228 | 5,075 | 5,798 |
| Sumatoria | 158,574 | 176,493 | 163,847 |
| x | 5,286 | 5,883 | 5,462 |
| Pro. (90) | | | 5,543 |
| Desv. (90) | | | 0,939 |

Tabla, 3

| MEDICIONES DE PESO (g) | | | |
|-------------------------------|----------------|----------------|----------------|
| Nº | A | B | C |
| 1 | 289,5 | 372,0 | 224,0 |
| 2 | 424,5 | 248,0 | 296,0 |
| 3 | 204,8 | 254,0 | 770,0 |
| 4 | 276,8 | 598,0 | 302,0 |
| 5 | 341,4 | 796,0 | 352,0 |
| 6 | 236,1 | 198,0 | 194,0 |
| 7 | 358,5 | 418,0 | 226,0 |
| 8 | 243,3 | 304,0 | 208,0 |
| 9 | 287,5 | 210,0 | 296,0 |
| 10 | 329,9 | 264,0 | 360,0 |
| 11 | 166,8 | 332,0 | 508,0 |
| 12 | 187,0 | 254,0 | 324,0 |
| 13 | 279,2 | 198,0 | 176,0 |
| 14 | 456,2 | 186,0 | 508,0 |
| 15 | 188,2 | 450,0 | 338,0 |
| 16 | 563,0 | 204,0 | 422,0 |
| 17 | 190,9 | 672,0 | 382,0 |
| 18 | 114,4 | 954,0 | 392,0 |
| 19 | 205,8 | 370,0 | 192,0 |
| 20 | 184,0 | 316,0 | 242,0 |
| 21 | 348,9 | 258,0 | 466,0 |
| 22 | 493,5 | 598,0 | 380,0 |
| 23 | 380,0 | 522,0 | 282,0 |
| 24 | 224,7 | 408,0 | 344,0 |
| 25 | 422,5 | 548,0 | 260,0 |
| 26 | 260,9 | 372,0 | 366,0 |
| 27 | 252,5 | 568,0 | 354,0 |
| 28 | 114,6 | 652,0 | 298,0 |
| 29 | 177,9 | 322,0 | 254,0 |
| 30 | 199,7 | 292,0 | 390,0 |
| Sumatoria | 8402,87 | 12138 | 10106 |
| x | 280,096 | 404,600 | 336,867 |
| Pro. (90) | 340,521 | | |
| Desv. (90) | 154,037 | | |

Tabla, 4

| MEDICIONES DE CASCARA (%) | | | |
|----------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 5,00 | 5,80 | 5,60 |
| 2 | 5,50 | 5,40 | 5,00 |
| 3 | 5,80 | 5,90 | 5,20 |
| 4 | 5,60 | 5,70 | 5,60 |
| 5 | 5,30 | 5,50 | 5,80 |
| 6 | 5,20 | 5,60 | 5,90 |
| 7 | 5,40 | 5,50 | 5,30 |
| 8 | 5,90 | 5,40 | 5,60 |
| 9 | 5,80 | 5,30 | 5,40 |
| 10 | 5,60 | 5,70 | 5,50 |
| 11 | 5,80 | 5,90 | 5,80 |
| 12 | 5,10 | 5,60 | 5,20 |
| 13 | 5,90 | 5,20 | 5,40 |
| 14 | 5,00 | 5,00 | 5,80 |
| 15 | 5,30 | 5,50 | 5,40 |
| 16 | 5,80 | 5,80 | 5,90 |
| 17 | 5,30 | 5,60 | 5,70 |
| 18 | 5,60 | 5,30 | 5,50 |
| 19 | 5,00 | 5,20 | 5,60 |
| 20 | 5,20 | 5,40 | 5,50 |
| 21 | 5,60 | 5,90 | 5,40 |
| 22 | 5,80 | 5,80 | 5,30 |
| 23 | 5,90 | 5,60 | 5,70 |
| 24 | 5,30 | 5,80 | 5,90 |
| 25 | 5,60 | 5,10 | 5,60 |
| 26 | 5,40 | 5,90 | 5,20 |
| 27 | 5,50 | 5,00 | 5,60 |
| 28 | 5,80 | 5,30 | 5,50 |
| 29 | 5,20 | 5,80 | 5,80 |
| 30 | 5,40 | 5,30 | 5,70 |
| Sumatoria | 164,60 | 165,80 | 166,40 |
| x | 5,487 | 5,527 | 5,547 |
| Pro. (90) | 5,520 | | |
| Desv. (90) | 0,266 | | |

Tabla, 5

| MEDICIONES DE PULPA (%) | | | |
|--------------------------------|-----------------|-----------------|-----------------|
| N° | A | B | C |
| 1 | 95,000 | 94,200 | 94,400 |
| 2 | 94,500 | 94,600 | 95,000 |
| 3 | 94,200 | 94,100 | 94,800 |
| 4 | 94,400 | 94,300 | 94,400 |
| 5 | 94,700 | 94,500 | 94,200 |
| 6 | 94,800 | 94,400 | 94,100 |
| 7 | 94,600 | 94,500 | 94,700 |
| 8 | 94,100 | 94,600 | 94,400 |
| 9 | 94,200 | 94,700 | 94,600 |
| 10 | 94,400 | 94,300 | 94,500 |
| 11 | 94,200 | 94,100 | 94,200 |
| 12 | 94,900 | 94,400 | 94,800 |
| 13 | 94,100 | 94,800 | 94,600 |
| 14 | 95,000 | 95,000 | 94,200 |
| 15 | 94,700 | 94,500 | 94,600 |
| 16 | 94,200 | 94,200 | 94,100 |
| 17 | 94,700 | 94,400 | 94,300 |
| 18 | 94,400 | 94,700 | 94,500 |
| 19 | 95,000 | 94,800 | 94,400 |
| 20 | 94,800 | 94,600 | 94,500 |
| 21 | 94,400 | 94,100 | 94,600 |
| 22 | 94,200 | 94,200 | 94,700 |
| 23 | 94,100 | 94,400 | 94,300 |
| 24 | 94,700 | 94,200 | 94,100 |
| 25 | 94,400 | 94,900 | 94,400 |
| 26 | 94,600 | 94,100 | 94,800 |
| 27 | 94,500 | 95,000 | 94,400 |
| 28 | 94,200 | 94,700 | 94,500 |
| 29 | 94,800 | 94,200 | 94,200 |
| 30 | 94,600 | 94,700 | 94,300 |
| Sumatoria | 2835,400 | 2834,200 | 2833,600 |
| x | 94,513 | 94,473 | 94,453 |
| Pro. (90) | 94,480 | | |
| Desv. (90) | 0,266 | | |

Tabla, 6

| MEDICIONES DE VOLUMEN (ml) | | | |
|-----------------------------------|----------------|----------------|----------------|
| N° | A | B | C |
| 1 | 250 | 350 | 220 |
| 2 | 395 | 235 | 280 |
| 3 | 175 | 245 | 770 |
| 4 | 240 | 570 | 300 |
| 5 | 310 | 750 | 330 |
| 6 | 195 | 168 | 200 |
| 7 | 315 | 384 | 220 |
| 8 | 200 | 287 | 210 |
| 9 | 235 | 180 | 290 |
| 10 | 288 | 230 | 350 |
| 11 | 125 | 300 | 480 |
| 12 | 118 | 230 | 300 |
| 13 | 255 | 175 | 180 |
| 14 | 420 | 170 | 490 |
| 15 | 130 | 440 | 320 |
| 16 | 528 | 220 | 380 |
| 17 | 155 | 630 | 360 |
| 18 | 88 | 860 | 370 |
| 19 | 180 | 360 | 190 |
| 20 | 150 | 290 | 235 |
| 21 | 310 | 240 | 440 |
| 22 | 460 | 550 | 360 |
| 23 | 365 | 470 | 285 |
| 24 | 188 | 380 | 330 |
| 25 | 390 | 510 | 250 |
| 26 | 215 | 330 | 350 |
| 27 | 225 | 530 | 350 |
| 28 | 90 | 610 | 280 |
| 29 | 130 | 290 | 250 |
| 30 | 145 | 260 | 380 |
| Sumatoria | 7270 | 11244 | 9750 |
| x | 242,330 | 374,800 | 325,000 |
| Pro. (90) | 314,044 | | |
| Desv. (90) | 149,541 | | |

Tabla, 7

| MEDICIONES DE RESITENCIA A LA PENETRACIÓN (dinas) | | | |
|--|---------------|---------------|---------------|
| Nº | A | B | C |
| 1 | 35 | 35 | 38 |
| 2 | 37 | 37 | 37 |
| 3 | 38 | 38 | 39 |
| 4 | 35 | 39 | 36 |
| 5 | 39 | 35 | 38 |
| 6 | 35 | 36 | 38 |
| 7 | 38 | 38 | 39 |
| 8 | 38 | 37 | 40 |
| 9 | 39 | 39 | 39 |
| 10 | 37 | 36 | 38 |
| 11 | 36 | 38 | 36 |
| 12 | 39 | 38 | 35 |
| 13 | 35 | 39 | 39 |
| 14 | 39 | 40 | 38 |
| 15 | 38 | 39 | 35 |
| 16 | 40 | 38 | 38 |
| 17 | 36 | 36 | 35 |
| 18 | 35 | 35 | 38 |
| 19 | 36 | 39 | 35 |
| 20 | 38 | 38 | 37 |
| 21 | 39 | 35 | 38 |
| 22 | 36 | 38 | 39 |
| 23 | 35 | 35 | 35 |
| 24 | 36 | 38 | 36 |
| 25 | 37 | 35 | 38 |
| 26 | 37 | 37 | 37 |
| 27 | 35 | 38 | 39 |
| 28 | 38 | 39 | 36 |
| 29 | 35 | 35 | 38 |
| 30 | 38 | 36 | 38 |
| Sumatoria | 1109 | 1116 | 1122 |
| x | 36,967 | 37,200 | 37,400 |
| Pro. (90) | 37,189 | | |
| Desv. (90) | 1,543 | | |

Tabla, 8

| MEDICIONES DE DENSIDAD(g/ml) | | | |
|-------------------------------------|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 1,158 | 1,063 | 1,018 |
| 2 | 1,075 | 1,055 | 1,057 |
| 3 | 1,170 | 1,037 | 1,000 |
| 4 | 1,153 | 1,049 | 1,007 |
| 5 | 1,101 | 1,061 | 1,067 |
| 6 | 1,211 | 1,179 | 0,970 |
| 7 | 1,138 | 1,089 | 1,027 |
| 8 | 1,217 | 1,059 | 0,990 |
| 9 | 1,223 | 1,167 | 1,021 |
| 10 | 1,145 | 1,148 | 1,029 |
| 11 | 1,334 | 1,107 | 1,058 |
| 12 | 1,585 | 1,104 | 1,080 |
| 13 | 1,095 | 1,131 | 0,978 |
| 14 | 1,086 | 1,094 | 1,037 |
| 15 | 1,448 | 1,023 | 1,056 |
| 16 | 1,066 | 0,927 | 1,111 |
| 17 | 1,232 | 1,067 | 1,061 |
| 18 | 1,300 | 1,109 | 1,059 |
| 19 | 1,143 | 1,028 | 1,011 |
| 20 | 1,227 | 1,090 | 1,030 |
| 21 | 1,125 | 1,075 | 1,059 |
| 22 | 1,073 | 1,087 | 1,056 |
| 23 | 1,041 | 1,111 | 0,989 |
| 24 | 1,195 | 1,079 | 1,042 |
| 25 | 1,083 | 1,075 | 1,040 |
| 26 | 1,213 | 1,127 | 1,046 |
| 27 | 1,122 | 1,072 | 1,011 |
| 28 | 1,273 | 1,069 | 1,069 |
| 29 | 1,368 | 1,110 | 1,016 |
| 30 | 1,377 | 1,123 | 1,026 |
| Sumatoria | 35,977 | 32,515 | 31,021 |
| x | 1,199 | 1,084 | 1,034 |
| Pro. (90) | 1,106 | | |
| Desv. (90) | 0,105 | | |

Tabla, 9

| MEDICIONES DE INDICE DE REFRACCIÓN | | | |
|---|--------------|--------------|--------------|
| (%) | | | |
| Nº | A | B | C |
| 1 | 1,350 | 1,350 | 1,350 |
| 2 | 1,350 | 1,350 | 1,350 |
| 3 | 1,350 | 1,350 | 1,350 |
| 4 | 1,350 | 1,350 | 1,350 |
| 5 | 1,350 | 1,350 | 1,350 |
| 6 | 1,350 | 1,350 | 1,350 |
| 7 | 1,350 | 1,350 | 1,350 |
| 8 | 1,350 | 1,350 | 1,350 |
| 9 | 1,350 | 1,350 | 1,350 |
| 10 | 1,350 | 1,350 | 1,350 |
| 11 | 1,350 | 1,350 | 1,350 |
| 12 | 1,350 | 1,350 | 1,350 |
| 13 | 1,350 | 1,350 | 1,350 |
| 14 | 1,350 | 1,350 | 1,350 |
| 15 | 1,350 | 1,350 | 1,350 |
| 16 | 1,350 | 1,350 | 1,350 |
| 17 | 1,350 | 1,350 | 1,350 |
| 18 | 1,350 | 1,350 | 1,350 |
| 19 | 1,350 | 1,350 | 1,350 |
| 20 | 1,350 | 1,350 | 1,350 |
| 21 | 1,350 | 1,350 | 1,350 |
| 22 | 1,350 | 1,350 | 1,350 |
| 23 | 1,350 | 1,350 | 1,350 |
| 24 | 1,350 | 1,350 | 1,350 |
| 25 | 1,350 | 1,350 | 1,350 |
| 26 | 1,350 | 1,350 | 1,350 |
| 27 | 1,350 | 1,350 | 1,350 |
| 28 | 1,350 | 1,350 | 1,350 |
| 29 | 1,350 | 1,350 | 1,350 |
| 30 | 1,350 | 1,350 | 1,350 |
| Sumatoria | 40,500 | 40,500 | 40,500 |
| x | 1,350 | 1,350 | 1,350 |
| Pro. (90) | 1,350 | | |
| Desv. (90) | 0,000 | | |

ANEXO 3, TABLAS DE DATOS PRUEBAS QUÍMICAS

Tabla, 10

| MEDICIONES DE Ph | | | |
|------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 6,89 | 6,87 | 6,89 |
| 2 | 6,87 | 6,88 | 6,87 |
| 3 | 6,88 | 6,87 | 6,89 |
| X | 6,880 | 6,873 | 6,883 |

Tabla, 11

| MEDICIONES DE HUMEDAD (%) | | | |
|---------------------------|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 70,79 | 70,95 | 71,15 |
| 2 | 70,79 | 72,05 | 70,85 |
| 3 | 71,032 | 70,63 | 70,8 |
| X | 70,871 | 71,210 | 70,933 |

Tabla, 12

| MEDICIONES DE ACIDES TITULABLE % | | | |
|----------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 0,72 | 0,76 | 0,79 |
| 2 | 0,73 | 0,73 | 0,71 |
| 3 | 0,78 | 0,74 | 0,74 |
| X | 0,743 | 0,743 | 0,747 |

Tabla, 13

| MEDICIONES DE SÓLIDOS SOLUBLES ° BRIX | | | |
|---------------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 4,3 | 4,41 | 4,52 |
| 2 | 4,5 | 4,5 | 4,41 |
| 3 | 4,43 | 4,66 | 4,5 |
| X | 4,410 | 4,523 | 4,477 |

Tabla, 14

| MEDICIONES DE SÓLIDOS TOTALES % | | | |
|--|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 29,210 | 29,050 | 28,850 |
| 2 | 29,240 | 27,950 | 29,160 |
| 3 | 28,680 | 29,370 | 29,200 |
| X | 29,043 | 28,790 | 29,070 |

Tabla, 15

| MEDICIONES DE AZUCARES REDUCTORES % | | | |
|--|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 3,22 | 3,18 | 3,19 |
| 2 | 3,09 | 3,27 | 3,15 |
| 3 | 3,15 | 3,2 | 3,18 |
| X | 3,153 | 3,217 | 3,173 |

Tabla, 16

| MEDICIONES DE AZUCARES TOTALES % | | | |
|---|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 5,05 | 4,91 | 4,86 |
| 2 | 4,78 | 4,84 | 4,9 |
| 3 | 4,92 | 4,75 | 4,93 |
| X | 4,917 | 4,833 | 4,897 |

Tabla, 17

| MEDICIONES DE FIBRA % | | | |
|------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 0,82 | 0,81 | 0,82 |
| 2 | 0,77 | 0,86 | 0,79 |
| 3 | 0,84 | 0,8 | 0,81 |
| X | 0,810 | 0,823 | 0,807 |

Tabla, 18

| MEDICIONES DE EXTRACTO ETereo % | | | |
|--|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 0,78 | 0,63 | 0,49 |
| 2 | 0,2 | 0,28 | 0,57 |
| 3 | 0,53 | 0,71 | 0,79 |
| X | 0,503 | 0,540 | 0,617 |

Tabla, 19

| MEDICIONES DE PROTEINA % | | | |
|---------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 1,12 | 1,1 | 0,98 |
| 2 | 0,96 | 0,98 | 1,06 |
| 3 | 1,04 | 1,15 | 1,04 |
| X | 1,040 | 1,077 | 1,027 |

Tabla, 20

| MEDICIONES DE CENIZAS % | | | |
|--------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 3,17 | 3,09 | 3,2 |
| 2 | 3,3 | 3,15 | 3,15 |
| 3 | 3,23 | 3,21 | 3,25 |
| X | 3,233 | 3,150 | 3,200 |

Tabla, 21

| MEDICIONES DE VITAMINA C mg | | | |
|------------------------------------|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 71,43 | 72,65 | 71,8 |
| 2 | 72,92 | 72,95 | 72,58 |
| 3 | 72,17 | 72,71 | 72,67 |
| X | 72,173 | 72,770 | 72,350 |

Tabla, 22

| MEDICIONES DE VITAMINA A mg | | | |
|------------------------------------|--------------|--------------|--------------|
| N° | A | B | C |
| 1 | 0,11 | 0,13 | 0,11 |
| 2 | 0,13 | 0,08 | 0,14 |
| 3 | 0,15 | 0,13 | 0,13 |
| X | 0,130 | 0,113 | 0,127 |

Tabla, 23

| MEDICIONES DE CALCIO mg/100g | | | |
|-------------------------------------|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 52,92 | 53,53 | 52,87 |
| 2 | 54,4 | 53,25 | 53,55 |
| 3 | 53,3 | 53,1 | 53,3 |
| X | 53,540 | 53,293 | 53,240 |

Tabla, 24

| MEDICIONES DE FOSFORO mg/100g | | | |
|--------------------------------------|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 48 | 49 | 48 |
| 2 | 47 | 47 | 47 |
| 3 | 52 | 51 | 51 |
| X | 49,000 | 49,000 | 48,667 |

Tabla, 25

| MEDICIONES DE POTASIO mg/kg | | | |
|------------------------------------|-------------|-------------|-------------|
| N° | A | B | C |
| 1 | 2197 | 2183 | 2187 |
| 2 | 2196 | 2172 | 2193 |
| 3 | 2198 | 2156 | 2188 |
| X | 2197 | 2170 | 2189 |

Tabla, 26

| MEDICIONES DE SODIO mg/100g | | | |
|------------------------------------|---------------|---------------|---------------|
| N° | A | B | C |
| 1 | 56,1 | 56,2 | 56,53 |
| 2 | 56 | 56,12 | 56,2 |
| 3 | 56,5 | 56,3 | 56,1 |
| X | 56,200 | 56,207 | 56,277 |

Tabla, 28 Reporte de análisis de alimentos (ESPOCH)

**ESCUELA SUPERIOR POLITECNICA DE CHIMBORAZO
FACULTAD DE CIENCIAS PECUARIAS
LABORATORIO DE NUTRICION ANIMAL**

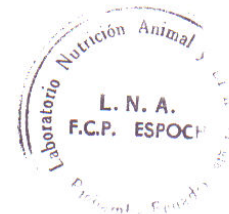
REPORTE DE ANALISIS DE ALIMENTOS

PROPIETARIO:
PROCEDENCIA: Ibarra
NOMBRE GENERICO: Zanahoria Blanca
PROCESO: Crudo
PARTE: Hoja
CODIGO: Rp -3045

ANALISIS DE MINERALES

| MINERALES | 1 corrida | 2 corrida | 3 corrida | 4 corrida | Promedio |
|-----------|-----------|-----------|-----------|-----------|----------|
| Calcio | 0,0529% | 0,0544% | 0,0533% | 0,0539% | 0,0536% |
| Potasio | 1,03% | 0,99% | 1,01% | 1,09% | 1,03% |
| Hierro | 0,0004% | 0,0004% | 0,0004% | 0,0004% | 0,0004% |
| Fosforo | 0,0480% | 0,0470% | 0,0500% | 0,0520% | 0,0493% |
| Magnesio | 0,0009% | 0,0011% | 0,0010% | 0,0011% | 0,0010% |
| Sodio | 0,0561% | 0,0560% | 0,0563% | 0,0565% | 0,0562% |


Ing. Patricio Guevara
JEFE LAB. NUTRICION ANIMAL



Tabla, 29 Reporte de análisis de alimentos (Universidad Central del Ecuador)



**UNIVERSIDAD CENTRAL DEL ECUADOR
FACULTAD DE CIENCIAS QUIMICAS
OFERTA DE SERVICIOS Y PRODUCTOS**



**LABORATORIO DE ALIMENTOS
INFORME DE RESULTADO**

INF-LAB-AL-7993
ORDEN DE TRABAJO No 11504

| | |
|--|----------------------------|
| SOLICITADO POR: | Marcelo Benálcazar |
| DIRECCIÓN DEL CLIENTE: | Ibarra |
| MUESTRA DE: | Alimento |
| DESCRIPCIÓN: | Zanahoria Blanca Muestra A |
| LOTE: | ----- |
| FECHA DE ELABORACIÓN: | ----- |
| FECHA DE VENCIMIENTO: | ----- |
| FECHA DE RECEPCIÓN: | 18/08/06 |
| HORA DE RECEPCIÓN: | 09:12 |
| FECHA DE ANÁLISIS: | 21/08/06 |
| FECHA DE ENTREGA DE RESULTADOS A LA SECRETARIA: | 22/08/06 |
| CARACTERÍSTICAS DE LA MUESTRA | |
| COLOR: | Característico |
| OLOR: | Característico |
| ESTADO: | Sólido |
| CONTENIDO DECLARADO: | CONTENIDO ENCONTRADO: |
| OBSERVACIONES: | |
| MUESTREADO POR: | El Cliente |

INFORME

| PARÁMETROS | UNIDAD | RESULTADO | METODO |
|------------|--------|-----------|--------|
| Almidón | % | 21.01 | MAL-54 |



x Bladimir Acosta

**Dr. Bladimir Acosta
LABORATORIO DE ALIMENTOS**

IMPORTANTE PARA EL USUARIO: Exija el original. La Facultad no se responsabiliza por documentos fotocopiados
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E-mail: secretariaosc@facquimuce.edu.ec Quito - Ecuador RAI-4 1-05

ANEXO 4, FORMATOS ESTADISTICOS

Formato Estadístico, 1 Números Aleatorios

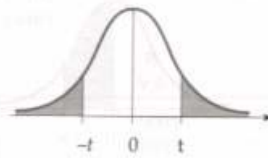
Tabla E.1 Tabla de números aleatorios

| | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 75421 | 11182 | 31304 | 08036 | 06922 | 77941 | 98944 | 30226 | 60766 | 90951 |
| 06692 | 19591 | 14171 | 04356 | 06744 | 46546 | 99184 | 97684 | 43283 | 86348 |
| 66865 | 12379 | 70386 | 09035 | 90126 | 74677 | 39885 | 84335 | 09442 | 21772 |
| 01098 | 06343 | 88773 | 94702 | 07203 | 60936 | 54445 | 12423 | 64560 | 99694 |
| 93526 | 56837 | 42025 | 45578 | 95193 | 97695 | 53146 | 51370 | 79913 | 83145 |
| 65129 | 31088 | 36253 | 40011 | 62078 | 72245 | 58783 | 47555 | 35631 | 45450 |
| 74312 | 81501 | 94303 | 30800 | 60660 | 69979 | 57625 | 00050 | 69795 | 15170 |
| 67348 | 11345 | 13161 | 40573 | 75687 | 78415 | 42407 | 97830 | 98069 | 98605 |
| 29241 | 77892 | 67728 | 60876 | 53046 | 75840 | 18933 | 18108 | 73509 | 76959 |
| 04366 | 94984 | 95131 | 22993 | 17240 | 63185 | 54786 | 31607 | 50705 | 61581 |
| 54205 | 61584 | 99698 | 74013 | 88263 | 96563 | 18003 | 77390 | 05762 | 40975 |
| 52801 | 44366 | 19745 | 74219 | 20962 | 91100 | 50685 | 56541 | 68392 | 96624 |
| 02573 | 59494 | 26362 | 40769 | 39340 | 19677 | 16923 | 04761 | 65952 | 03630 |
| 15696 | 32426 | 64984 | 99029 | 88073 | 28814 | 44849 | 39871 | 00825 | 29966 |
| 26032 | 33340 | 54573 | 55786 | 75303 | 14546 | 37499 | 43894 | 86358 | 19706 |
| 41349 | 18921 | 50835 | 65861 | 79521 | 38319 | 33999 | 74851 | 97319 | 17221 |
| 31246 | 35797 | 89051 | 36319 | 38137 | 11101 | 02808 | 36771 | 63163 | 00816 |
| 55704 | 87671 | 81967 | 18984 | 94617 | 89097 | 91625 | 49172 | 07106 | 06218 |
| 09107 | 53117 | 75664 | 25300 | 98186 | 29702 | 73632 | 77044 | 08238 | 08097 |
| 53779 | 05917 | 98367 | 58743 | 33981 | 66547 | 45665 | 11168 | 81086 | 29458 |
| 05252 | 99475 | 70537 | 29636 | 46984 | 49231 | 73571 | 64092 | 26162 | 26361 |
| 92966 | 81458 | 79792 | 39399 | 39278 | 20247 | 45367 | 76937 | 64563 | 73930 |
| 68109 | 88529 | 70116 | 11782 | 24198 | 68334 | 83184 | 26202 | 49315 | 30471 |
| 53118 | 70359 | 68973 | 95173 | 29213 | 29969 | 00445 | 24846 | 50957 | 80443 |
| 60924 | 44136 | 71034 | 80642 | 62977 | 93957 | 21006 | 66422 | 96753 | 69814 |
| 11151 | 59784 | 77446 | 64703 | 22038 | 40357 | 57749 | 62349 | 88018 | 20160 |
| 32731 | 14203 | 36222 | 13436 | 16935 | 26412 | 09878 | 27931 | 54679 | 39275 |
| 04037 | 48341 | 96595 | 26036 | 57521 | 16245 | 71204 | 44232 | 09527 | 49083 |
| 75807 | 89169 | 30622 | 23911 | 73689 | 50718 | 33796 | 30145 | 97763 | 75137 |
| 93509 | 65893 | 82351 | 54938 | 26829 | 04823 | 71697 | 46159 | 43465 | 99159 |
| 33528 | 38008 | 53069 | 29029 | 36617 | 09019 | 96758 | 52955 | 75018 | 83253 |
| 10603 | 93078 | 11673 | 36373 | 71957 | 89710 | 15378 | 52022 | 57934 | 86236 |
| 99155 | 30214 | 58351 | 16606 | 08569 | 19665 | 22531 | 50753 | 22759 | 90501 |
| 97268 | 87653 | 40124 | 51615 | 27365 | 26027 | 70255 | 23368 | 78952 | 05515 |
| 93564 | 66965 | 91850 | 25093 | 53517 | 39997 | 17521 | 57074 | 76743 | 11610 |
| 06959 | 27612 | 66188 | 34331 | 17367 | 84340 | 00247 | 49881 | 01997 | 33786 |
| 13172 | 61241 | 53558 | 59819 | 15082 | 72692 | 43138 | 22677 | 55844 | 70034 |
| 03690 | 57173 | 38889 | 03032 | 69496 | 42566 | 23096 | 43416 | 78732 | 12420 |
| 38005 | 70085 | 74744 | 32644 | 88440 | 12489 | 39538 | 64712 | 92792 | 51310 |
| 28756 | 45596 | 59049 | 79799 | 68763 | 49827 | 57854 | 76334 | 99227 | 11380 |
| 84260 | 58136 | 31250 | 88953 | 04929 | 06903 | 21175 | 42463 | 15227 | 15205 |
| 77800 | 77252 | 68397 | 37335 | 53941 | 59771 | 92875 | 37004 | 57044 | 18210 |
| 99505 | 24764 | 22807 | 54083 | 90303 | 43362 | 71223 | 96233 | 88058 | 03268 |
| 53801 | 68932 | 38510 | 87838 | 68543 | 73671 | 57403 | 50077 | 63351 | 55781 |
| 68379 | 47885 | 33801 | 10666 | 74222 | 81999 | 16699 | 51745 | 84672 | 11640 |
| 30033 | 45809 | 69655 | 31679 | 56931 | 40579 | 53867 | 22586 | 00794 | 67305 |
| 73888 | 69685 | 91050 | 60898 | 06171 | 01165 | 04192 | 03700 | 27979 | 76516 |
| 50935 | 51867 | 76172 | 52543 | 30383 | 43396 | 67725 | 68868 | 15571 | 78654 |
| 04689 | 09839 | 11001 | 18560 | 21328 | 87664 | 08203 | 82426 | 23946 | 82792 |
| 65860 | 84568 | 88383 | 49927 | 52267 | 63736 | 01964 | 86914 | 14949 | 55467 |

Fuente: Robert D. Mnson y Douglas A. Lind, *Statistical Techniques in Business and Economics*, 7ª. ed., Homewood, Ill.: Richard D. Irwin, 1990, p. 355.

Formato Estadístico, 2

Distribución t-student



| | | Área de dos colas | | | | | |
|-----|--|-------------------|-------|--------|--------|--------|---------|
| gl | | .20 | .10 | .05 | .02 | .01 | .001 |
| 1 | | 3.078 | 6.314 | 12.706 | 31.821 | 63.657 | 636.619 |
| 2 | | 1.886 | 2.920 | 4.303 | 6.965 | 9.925 | 31.598 |
| 3 | | 1.638 | 2.353 | 3.182 | 4.541 | 5.841 | 12.941 |
| 4 | | 1.533 | 2.132 | 2.776 | 3.747 | 4.604 | 8.610 |
| 5 | | 1.476 | 2.015 | 2.571 | 3.365 | 4.032 | 6.859 |
| 6 | | 1.440 | 1.943 | 2.447 | 3.143 | 3.707 | 5.959 |
| 7 | | 1.415 | 1.895 | 2.365 | 2.998 | 3.499 | 5.405 |
| 8 | | 1.397 | 1.860 | 2.306 | 2.896 | 3.355 | 5.041 |
| 9 | | 1.383 | 1.833 | 2.262 | 2.821 | 3.250 | 4.781 |
| 10 | | 1.372 | 1.812 | 2.228 | 2.764 | 3.169 | 4.587 |
| 11 | | 1.363 | 1.796 | 2.201 | 2.718 | 3.106 | 4.437 |
| 12 | | 1.356 | 1.782 | 2.179 | 2.681 | 3.055 | 4.318 |
| 13 | | 1.350 | 1.771 | 2.160 | 2.650 | 3.012 | 4.221 |
| 14 | | 1.345 | 1.761 | 2.145 | 2.624 | 2.977 | 4.140 |
| 15 | | 1.341 | 1.753 | 2.131 | 2.602 | 2.947 | 4.073 |
| 16 | | 1.337 | 1.746 | 2.120 | 2.583 | 2.921 | 4.015 |
| 17 | | 1.333 | 1.740 | 2.110 | 2.567 | 2.898 | 3.965 |
| 18 | | 1.330 | 1.734 | 2.101 | 2.552 | 2.878 | 3.922 |
| 19 | | 1.328 | 1.729 | 2.093 | 2.539 | 2.681 | 3.883 |
| 20 | | 1.325 | 1.725 | 2.086 | 2.528 | 2.845 | 3.850 |
| 21 | | 1.323 | 1.721 | 2.080 | 2.518 | 2.831 | 3.819 |
| 22 | | 1.321 | 1.717 | 2.074 | 2.508 | 2.819 | 3.792 |
| 23 | | 1.319 | 1.714 | 2.069 | 2.500 | 2.807 | 3.767 |
| 24 | | 1.318 | 1.711 | 2.064 | 2.492 | 2.797 | 3.745 |
| 25 | | 1.316 | 1.708 | 2.060 | 2.485 | 2.787 | 3.725 |
| 26 | | 1.315 | 1.706 | 2.056 | 2.479 | 2.779 | 3.707 |
| 27 | | 1.314 | 1.703 | 2.052 | 2.473 | 2.771 | 3.690 |
| 28 | | 1.313 | 1.701 | 2.048 | 2.467 | 2.763 | 3.674 |
| 29 | | 1.311 | 1.699 | 2.045 | 2.462 | 2.756 | 3.659 |
| 30 | | 1.310 | 1.697 | 2.042 | 2.457 | 2.750 | 3.646 |
| 40 | | 1.303 | 1.684 | 2.021 | 2.423 | 2.704 | 3.551 |
| 60 | | 1.296 | 1.671 | 2.000 | 2.390 | 2.660 | 3.460 |
| 120 | | 1.289 | 1.658 | 1.980 | 2.358 | 2.617 | 3.373 |
| ∞ | | 1.282 | 1.645 | 1.960 | 2.326 | 2.576 | 3.291 |
| | | .10 | .05 | .025 | .01 | .005 | .0005 |
| | | Área de una cola | | | | | |

Fuente: Goldstein Software, Inc. por el programa Goldspread Statistical, que se usó para generar esta tabla.

ANEXO 5, ILUSTRACIONES FOTOGRÁFICAS

Fotografía, 1

Localidad de San José de Minas.



Fotografía, 2

Cultivo de Zanahoria Blanca



Fotografía, 3

Planta de Zanahoria Blanca.



Fotografía, 4

Raíz de Zanahoria Blanca



Fotografía, 5

Cosecha de la Zanahoria Blanca

