**Estimation CSF:**

**Description des variables**

var1 = Superficie emblavee (ha)

var2 = Quantite d’eau saison froide

var3 = Quantite d’eau saison chaude

var4 = Quantite de semences (en kg)

var5 = Quantite d’uree (em kg)

var6 = Quantite de NPK (kg)

var9 = Main d’oeuvre totale

**Stoc. frontier normal/half-normal model: culture = Aubergine amere**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .382 | | .345 | 1.11 | | .267 | -.293 | | 1.058 | |  |
| lnvar2 | .207 | | .263 | 0.79 | | .431 | -.308 | | .722 | |  |
| lnvar4 | .387 | | .311 | 1.24 | | .214 | -.223 | | .997 | |  |
| lnvar5 | -.046 | | .071 | -0.64 | | .521 | -.185 | | .093 | |  |
| lnvar6 | .059 | | .091 | 0.64 | | .52 | -.12 | | .237 | |  |
| lnvar9 | -.107 | | .137 | -0.79 | | .432 | -.375 | | .16 | |  |
| Constant | 9.459 | | .771 | 12.27 | | 0 | 7.948 | | 10.97 | | \*\*\* |
| Constant | -3.622 | | 2.736 | -1.32 | | .186 | -8.984 | | 1.74 | |  |
| Constant | .301 | | .455 | 0.66 | | .508 | -.591 | | 1.193 | |  |
|  | | | | | | | | | | | |
| Mean dependent var | | 8.277 | | | SD dependent var | | | 1.222 | |
| Number of obs | | 32.000 | | | Chi-square | | | 102.154 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 81.121 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |

**Stoc. frontier normal/half-normal model: culture = Carrotte**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .401 | | 0 | 6035.63 | | 0 | .401 | | .401 | | \*\*\* |
| lnvar2 | .372 | | 0 | 7416.78 | | 0 | .371 | | .372 | | \*\*\* |
| lnvar4 | -.028 | | 0 | -346.89 | | 0 | -.028 | | -.027 | | \*\*\* |
| lnvar5 | .112 | | 0 | 5198.20 | | 0 | .112 | | .112 | | \*\*\* |
| lnvar6 | .058 | | 0 | 1929.84 | | 0 | .058 | | .058 | | \*\*\* |
| lnvar9 | .044 | | 0 | 620.79 | | 0 | .044 | | .044 | | \*\*\* |
| Constant | 7.746 | | 0 | 21230.21 | | 0 | 7.746 | | 7.747 | | \*\*\* |
| Constant | -31.873 | | 295.543 | -0.11 | | .914 | -611.128 | | 547.381 | |  |
| Constant | 1.155 | | .218 | 5.29 | | 0 | .728 | | 1.583 | | \*\*\* |
|  | | | | | | | | | | | |
| Mean dependent var | | 9.131 | | | SD dependent var | | | 1.774 | |
| Number of obs | | 42.000 | | | Chi-square | | | 1289768828.315 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 127.493 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |

**Stoc. frontier normal/half-normal model: culture = Chou**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .688 | | .102 | 6.71 | | 0 | .487 | | .889 | | \*\*\* |
| lnvar2 | -.076 | | .069 | -1.10 | | .273 | -.211 | | .06 | |  |
| lnvar4 | .212 | | .103 | 2.06 | | .04 | .01 | | .414 | | \*\* |
| lnvar5 | .045 | | .027 | 1.65 | | .099 | -.008 | | .097 | | \* |
| lnvar6 | -.03 | | .021 | -1.39 | | .165 | -.072 | | .012 | |  |
| lnvar9 | .035 | | .05 | 0.70 | | .482 | -.063 | | .134 | |  |
| Constant | 9.987 | | .324 | 30.83 | | 0 | 9.352 | | 10.622 | | \*\*\* |
| Constant | -1.694 | | .354 | -4.79 | | 0 | -2.388 | | -1.001 | | \*\*\* |
| Constant | -.675 | | .413 | -1.64 | | .102 | -1.483 | | .134 | |  |
|  | | | | | | | | | | | |
| Mean dependent var | | 8.912 | | | SD dependent var | | | 1.121 | |
| Number of obs | | 139.000 | | | Chi-square | | | 331.694 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 270.326 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |

**Stoc. frontier normal/half-normal model: culture = Oignon**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .524 | | .127 | 4.13 | | 0 | .275 | | .773 | | \*\*\* |
| lnvar2 | .01 | | .079 | 0.13 | | .896 | -.145 | | .166 | |  |
| lnvar4 | .012 | | .116 | 0.10 | | .917 | -.215 | | .239 | |  |
| lnvar5 | .01 | | .032 | 0.31 | | .759 | -.052 | | .071 | |  |
| lnvar6 | .008 | | .026 | 0.29 | | .769 | -.044 | | .059 | |  |
| lnvar9 | .141 | | .055 | 2.54 | | .011 | .032 | | .249 | | \*\* |
| Constant | 9.22 | | .363 | 25.41 | | 0 | 8.509 | | 9.931 | | \*\*\* |
| Constant | -1.531 | | .277 | -5.52 | | 0 | -2.074 | | -.988 | | \*\*\* |
| Constant | -.418 | | .304 | -1.38 | | .169 | -1.015 | | .178 | |  |
|  | | | | | | | | | | | |
| Mean dependent var | | 8.630 | | | SD dependent var | | | 0.866 | |
| Number of obs | | 167.000 | | | Chi-square | | | 113.982 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 356.040 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |

**Stoc. frontier normal/half-normal model: culture = Piment**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .362 | | .261 | 1.39 | | .164 | -.148 | | .873 | |  |
| lnvar2 | .343 | | .051 | 6.71 | | 0 | .243 | | .444 | | \*\*\* |
| lnvar4 | -.089 | | .017 | -5.28 | | 0 | -.123 | | -.056 | | \*\*\* |
| lnvar5 | -.14 | | .033 | -4.25 | | 0 | -.205 | | -.075 | | \*\*\* |
| lnvar6 | -.029 | | .05 | -0.58 | | .565 | -.128 | | .07 | |  |
| lnvar9 | .262 | | .034 | 7.80 | | 0 | .197 | | .328 | | \*\*\* |
| Constant | 7.789 | | .301 | 25.91 | | 0 | 7.2 | | 8.379 | | \*\*\* |
| Constant | -33.883 | | 827.909 | -0.04 | | .967 | -1656.555 | | 1588.789 | |  |
| Constant | .136 | | .283 | 0.48 | | .63 | -.418 | | .69 | |  |
|  | | | | | | | | | | | |
| Mean dependent var | | 7.653 | | | SD dependent var | | | 0.746 | |
| Number of obs | | 25.000 | | | Chi-square | | | 367635628.840 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 57.691 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |

**Stoc. frontier normal/half-normal model: culture = Pomme de terre**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .913 | | .138 | 6.60 | | 0 | .642 | | 1.184 | | \*\*\* |
| lnvar2 | -.148 | | .092 | -1.61 | | .108 | -.329 | | .033 | |  |
| lnvar4 | .257 | | .122 | 2.10 | | .036 | .017 | | .496 | | \*\* |
| lnvar5 | -.019 | | .033 | -0.58 | | .562 | -.083 | | .045 | |  |
| lnvar6 | -.097 | | .042 | -2.31 | | .021 | -.178 | | -.015 | | \*\* |
| lnvar9 | -.023 | | .073 | -0.32 | | .752 | -.166 | | .12 | |  |
| Constant | 9.13 | | .763 | 11.97 | | 0 | 7.635 | | 10.625 | | \*\*\* |
| Constant | -1.959 | | .561 | -3.49 | | 0 | -3.057 | | -.86 | | \*\*\* |
| Constant | -.601 | | .501 | -1.20 | | .231 | -1.583 | | .382 | |  |
|  | | | | | | | | | | | |
| Mean dependent var | | 8.690 | | | SD dependent var | | | 0.810 | |
| Number of obs | | 77.000 | | | Chi-square | | | 86.333 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 150.750 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |

**Stoc. frontier normal/half-normal model: culture = Tomate**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| lnprod | Coef. | | St.Err. | t-value | | p-value | [95% Conf | | Interval] | | Sig |
| lnvar1 | .199 | | .156 | 1.28 | | .201 | -.106 | | .505 | |  |
| lnvar2 | .329 | | .12 | 2.75 | | .006 | .094 | | .563 | | \*\*\* |
| lnvar4 | .201 | | .162 | 1.24 | | .216 | -.117 | | .519 | |  |
| lnvar5 | -.062 | | .048 | -1.30 | | .193 | -.156 | | .031 | |  |
| lnvar6 | -.078 | | .053 | -1.45 | | .146 | -.183 | | .027 | |  |
| lnvar9 | .184 | | .104 | 1.76 | | .079 | -.021 | | .388 | | \* |
| Constant | 7.965 | | 1.411 | 5.64 | | 0 | 5.199 | | 10.73 | | \*\*\* |
| Constant | -1.219 | | .268 | -4.55 | | 0 | -1.744 | | -.694 | | \*\*\* |
| Constant | -6.937 | | 106.374 | -0.07 | | .948 | -215.426 | | 201.553 | |  |
|  | | | | | | | | | | | |
| Mean dependent var | | 8.088 | | | SD dependent var | | | 0.791 | |
| Number of obs | | 36.000 | | | Chi-square | | | 38.088 | |
| Prob > chi2 | | 0.000 | | | Akaike crit. (AIC) | | | 76.330 | |
| *\*\*\* p<.01, \*\* p<.05, \* p<.1* | | | | | | | | | | | |
|  | | | | | | | | | | | |