Table 1. Description of the study areas in the region

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Region | Municipality | (code) Situation | Area (ha) | Initials |
| Cerrado | Presidente Olegário | (1) Pasture | 10 | CE 1 |
| (2) Coffee (without pruning) on pasture | 27,5 | CE 2 |
| (3) Coffee (with pruning) on pasture | 18,3 | CE 3 |
| (4) Coffee (without pruning) on coffee | 3,5 | CE 4 |
| (5) Coffee (with pruning) on coffee | 33,5 | CE 5 |
| Sul de Minas | São Tomas de Aquino | (1) Pasture | 5 | SM 1 |
| (2) Coffee (without pruning) on pasture | 0,7 | SM 2 |
| (3) Coffee (with pruning) on pasture | 14,2 | SM 3 |
| (4) Coffee (without pruning) on coffee | 18,6 | SM 4 |
| (5) Coffee (with pruning) on coffee | 12,4 | SM 5 |
| Matas de Minas | Manhumirim | (1) Pasture | 15 | MM 1 |
| (2) Coffee (without pruning) on pasture | 3 | MM 2 |
| (3) Coffee (with pruning) on pasture | 1,5 | MM 3 |
| (4) Coffee (without pruning) on coffee | 1,5 | MM 4 |
| (5) Coffee (with pruning) on coffee | 0,8 | MM 5 |

Table 2. History of land use and management of areas of study

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| History | Situation | | | | |
| CE 1 | CE 2 | CE 3 | CE 4 | CE 5 |
| Land use preceding of the coffee cultivation | | | | | |
| Year of deforestation | 1953 | 1953 | 1953 | 1953 | 1953 |
| Pasture (number of years) | 62 | 53 | 39 | 40 | 24 |
| Annual crops (number of years) | - | - | 2 | 4 | - |
| Period on each management Coffee (number of years) | | | | | |
| Coffee without pruning | - | 8 | - | 10 | - |
| Coffee with pruning | - | - | 21 | - | 23 |
| Coffee without pruning on coffee | - | - | - | 7 | - |
| Coffee with pruning on coffee | - | - | - | - | 12 |
| Total period with coffee | - | 8 | 21 | 17 | 35 |
| Pruning events, uprooting and replanting (Year) | | | | | |
| *“Esqueletamento”* | - | - | - | - | 1997/2011 |
| *“Recepa”* | - | - | 2009 | - | - |
| Uprooting | - | - | - | 2007 | 2003 |
| Replating | - | - | - | 2008 | 2003 |
|  | SM 1 | SM 2 | SM 3 | SM 4 | SM 5 |
| Land use preceding of the coffee cultivation | | | | | |
| Year of deforestation | 1946 | 1940 | 1940 | 1950 | 1935 |
| Pasture (number of years) | 48 | 65 | 50 | 4 | 42 |
| Annual crops (number of years) | 20 | - | 0 | 2 | 1 |
| Period on each management Coffee (number of years) | | | | | |
| Coffee without pruning | - | 10 | - | 50 | - |
| Coffee with pruning | - | - | 25 | - | 19 |
| Coffee without pruning on coffee | - | - | - | 9 | - |
| Coffee with pruning on coffee | - | - | - | - | 18 |
| Total period with coffee | - | 10 | 25 | 59 | 37 |
| Pruning events, uprooting and replanting (Year) | | | | | |
| *“Esqueletamento”* | - | - | 2003/2008/2014 | - | 2006/2012 |
| “*Recepa*” | - | - | - | - | - |
| Uprooting | - | - | - | 1994/2006 | 1996 |
| Replating | - | - | - | 1995/2006 | 1997 |
|  | MM 1 | MM 2 | MM 3 | MM 4 | MM 5 |
| Land use preceding of the coffee cultivation | | | | | |
| Year of deforestation | 1960 | 1970 | 1975 | 1970 | 1975 |
| Pasture (number of years) | 55 | 39 | 5 | 5 | - |
| Annual crops (number of years) | 0 | - | - | - | - |
| Period on each management Coffee (number of years) | | | | | |
| Coffee without pruning | - | 6 | - | 32 | - |
| Coffee with pruning | - | - | 35 | - | 30 |
| Coffee without pruning on coffee | - | - | - | 8 | - |
| Coffee with pruning on coffee | - | - | - | - | 10 |
| Total period with coffee | - | 6 | 35 | 40 | 40 |
| Pruning events, uprooting and replanting (Year) | | | | | |
| *“Esqueletamento”* | - | - | - | - | 2013 |
| “*Recepa*” | - | - | 2000/2010 | - | 1990 |
| Uprooting | - | - | - | 2006 | 2004 |
| Replating | - | - | - | 2007 | 2005 |

Table 3. Information on chronosequence considered in the study.

|  |  |  |  |
| --- | --- | --- | --- |
| Chronosequence | Reference  (code Situation) | First LUC  (code Situation) | Second LUC  (code Situation) |
| I | Pasture (1) | Coffee without pruning on pasture (2) | Coffee without pruning on coffee (4) |
| II | Pasture (1) | Coffee with pruning on pasture (3) | Coffee with pruning on coffee (5) |