Table 2. Annual CO2 equivalent fluxes to atmosphere (kg ha-1) for the Forage-Cotton (Forage\_Ctn) and Old World Bluestem-Bermudagrass (OWB\_BER) integrated crop-livestock (ICL) systems.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Integrated crop-livestock system** | **Fossil Fuels** | **Steers †** | **Soil C ‡** | **Soil gas** | **Residue returned** | **Net Balance** |
| Forage\_Ctn(dryland) | 752 | 486 | -928 | 4435 | -4743 | 2.3 |
| OWB\_BER (def. irrigated) | 2838 | 2702 | -2714 | 8158 | -7419 | 3566 |

†Calculation for fluxes from steers was based on fermentation models.

‡Soil C was calculated as the mean annual change relative to non-grazed cotton/millet components of the Forage\_Ctn ICL.