FIGURES
EVENTS OF MONOCARPIC SENESCEENCE IN CEREALS

YEARS AFTER
ANTHESIS

0
GRAIN-FILLING

7
GRAIN DEVELOPMENT

14
GRAIN MATURATION

21
SENESCENT

28

GENERAL DISORGANIZATION AND DEATH

LEAF
Fig. 1. Changes in chlorophyll content in the flag (O—O), second (Δ—Δ) and third (O—O) leaf of six rice cultivars during the progress of reproductive development. Data were recorded at intervals of 7 days from anthesis to senescent stage of each rice cultivar. Bars indicate ± SE for six replicates.
Fig. 2. Changes in protein content in the flag (0—0), second (Δ—Δ) and third (0—0) leaf of six rice cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 3. Changes in chlorophyll and protein contents in the flag (ΟΟΟ), second (ΔΔΔ) and third (ΟΟΟ) leaf of two wheat cultivars during the progress of reproductive development. Data were recorded as in Fig 1. Bars as in Fig 1.
Fig. 4. Total leaf area and changes in the percentage of yellowing patches (expressed as percentage of total leaf area) in the flag (□) and second (■) leaf of six rice cultivars. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 5. Diagrammatic representation of green (□) and yellow (■) area of the flag (F) and second (S) leaf of six rice cultivars during the progress of reproductive development.
Fig. 6. Total leaf area and changes in the percentage of yellowing patches (expressed as percentage of total leaf area) in the flag (flag) and second (second) leaf of two wheat cultivars. Data were recorded at intervals of 7 days from grain development to senescent stage of each cultivar. Bars as in Fig. 1.
Fig. 7. Diagrammatic representation of green (◇) and yellow (■) areas of flag (F) and second (S) leaf of two wheat cultivars during the progress of reproductive development.
Fig. 8. Changes in nitrogen content in the flag (○-○), second (△-△) and third (□-□) leaf of three rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 9. Changes in phosphorus content in the flag (○—○), second (△—△) and third (○—○) leaf of three rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 10. Changes in mobilization of $^{32}\text{P}$-phosphate from the whole flag (○—○), second (△—△) and third (○—○) leaf to the grains of three rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig.11. Changes in mobilization of $^{32}$P-phosphate on unit leaf area basis from the flag (○○), second (△△) and third (●●) leaf to the grains of three rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 12. Changes in retention of $[^{32}\text{P}]$-phosphate in the flag (0—0), second (Δ—Δ) and third (0—0) leaf of three rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 13. Changes in the export of $[^{32}\text{p}]$-phosphate from the roots to the flag (--- 0), second (△△△) and third (○○○) leaf and grains (●●●) of three rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 14. Diagrammatic representation of total number of vascular bundles and area of the xylem vessels in a bundle at the juncture of leaf lamina and leaf sheath of the flag and second leaf of three rice cultivars.
Fig. 15. Changes in the contents of RNA in the flag (○—○), second (△—△) and third (□—□) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 16. Changes in the content of histone protein and the ratio of RNA and histone in the flag (O--O), second (△--△) and third (○--○) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 17. Changes in the accumulation of free amino acids in the flag (0—0), second (△—△) and third (0—0) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 18. Changes in the protease activity in the flag (○-○), second (△-△) and third (○-○) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 19. Changes in the content of malondialdehyde and the activity of superoxide dismutase in the flag (○—○), second (△—△) and third (○—○) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 20. Changes in the activity of catalase and peroxidase in the flag (O--O), second (△--△) and third (□--□) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 21. Changes in the accumulation of proline in the flag (○—○), second (△—△) and third (○—○) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 22. Changes in the content of endogenous cytokinin-like substances in the flag ( ), second ( ) and third ( ) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig.23. Changes in the content of endogenous abscisic acid in the flag (-----0), second (Δ—Δ) and third (○—○) leaf of two rice and one wheat cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.
Fig. 24. Changes in the ratio of cytokinin-like substances to abscisic acid in the flag (○-○), second (△-△) and third (□-□) leaf of two rice and one wheat cultivars during the progress of reproductive development.
Fig. 25. Changes in the evolution of endogenous ethylene from the flag (0—0), second (Δ—Δ) and third (0—0) leaf of two rice and one wheat cultivars during the progress of reproductive development Data were recorded as in Fig. 1. Bars as in Fig. 1.
Fig. 26. Changes in the content of total protein (○—○), RNA (△—△), DNA (□—□) and histone protein (●—●) in the shoot apex of Rasi rice cultivar prior to panicle emergence. Bars as in Fig. 1.
Fig. 27. Changes in the content of total protein (O--O), RNA (Δ--Δ), DNA (φ--φ) and histone protein (•--•) in the shoot apex of Kalojira rice cultivar prior to panicle emergence. Bars as in Fig. 1.
Fig. 28. Changes in the content of total protein (○—○), RNA (△—△), DNA (○—○) and histone protein (●—●) in the shoot apex of Sonalika wheat cultivar prior to panicle emergence. Bars as in Fig. 1.
Fig.29. Changes in the content of chlorophyll and protein in the glumes of rice [Rasi (○—○), Kalojira (○—○)] and wheat [Sonalika (△—△)] cultivars during the progress of reproductive development. Data were recorded as in Fig.1. Bars as in Fig.1.

(N.B: The data of chlorophyll of Kalojira rice cultivar are not given here due to its very small amount.)