

## G. Ellis Marks Collection (GEM)

### REPRINTS

Provenance  
Deposited March 1992

*[These reprints were part of the collection sent to the University of Hull in 1992. They were transferred to the JIC as a temporary measure for listing by the Archivist (RDH). The intention was to send them later to join the main collection at Hull [information supplied by GEM, Nov 2000. Await further info re. Sue Bougard, Uni of Hull].*

Reprints on the following subjects. Some include other items:

Luzula (and negatives)  
Pisum polyteny.  
Celery: Robertsonian exchange. B.Chrs.  
D.NA.  
"Heinz I"  
"Heinz III"  
"Misc. 1"  
Forsythia (correspondence, mss, reprints, photographs).  
Cytology.  
Banding.  
Nucleolus  
Chromosome structure

## SCIENTIFIC NOTEBOOKS

These notebooks were deposited in two batches in 1985 and 1986. At first they were shelved with the Main sequence of Scientific Notebooks. They have now been returned to the G Ellis Marks Collection (November 2000).

*GEM reported that when at Cambridge they used the larger format "SO books" and so these can be distinguished from the smaller and more familiar format.*

***See spreadsheet on separate sheet***

## G. ELLIS MARKS COLLECTED PAPERS

*These are shelved with the Staff Reprints Collection*

**GEM to send complete list**

A controllable carmine technic for plants with small chromosomes. (Stain Technology, 1952,21:333- 336)

(With G. Haskell)\_Chromosome ecology of British *Galinsoga* species. (New Phytologist, 1952, 51:382-387)

(With M.B.Crane) Pear-apple hybrids. (Nature, 1952,170:1017)

Genetical studies in pears. VI. Giant bud sports. (J.Horticultural Science, 1953, 28: 141-144)

Cytogenetic studies in tuberous *Solanum* species. I. Genomic differentiation in the group Demissa. (Journal of Genetics, 1955, 53: 262-269)

A polyhaploid plant of *Solanum polytrichon* Rydb. (Nature, 1955, 175:469).

Chromosome numbers in the genus *Oxalis*. (New Phytologist, 1956, 55:120-129).

The cytology of *Oxalis dispar* (Brown). (Chromosoma, 1957, 8:650-670)

Telocentric chromosomes. (American Naturalist, 1957, 91:223-232).

Cytogenetic studies in tuberous *Solanum* species. II. A synthesis of *Solanum* x Vallis-Mexici Juz. (New Phytologist, 1958, 57: 300-310).

Chromosome numbers in potato cultivars hypersensitive to late blight. (Euphytica, 1960, 9:254-257).

(With K.A.Beckett) The cytology of Forsythia 'Beatrix Farrand' and its related cultivars. (Euphytica, 1963, 12:32-34).

*Forsythia* 'Beatrix Farrand.' (Journal of the Royal Horticultural Society, 1963, 88:351-352).

Cytogenetic studies in tuberous *Solanum* species. III. Species relationships in some South and Central American species. (New Phytologist, 1965, 64:293-306).

The cytology of *Phytophthora infestans*. (Chromosoma (Berl.), 1965,16:681-692).

(With R.K.McKee and J .B.Harborne) Double chromosome reduction in a tetraploid *Solanum*. (Nature, 1965, 1965: 208:359-361).

The enigma of triploid potatoes. (Euphytica, 1966, 1:1::285-290).

A further note on Forsythia 'Beatrix Farrand'. (J.Roy.Horticultural Society, 1966, 91:307-308).

The origin and significance of intraspecific polyploidy: experimental evidence from *Solanum chacoense*. (Evolution, 1966, 20:552-557).

Structural hybridity in a tuberous *Solanum* hybrid. (Canadian Journal of Genetics and Cytology, 1968, 10:18-23).

The pachytene chromosomes of *Solanum clarum*. (Caryologia, 1969, 22:162-167).

(With R.Kessel) Making chromosome counts in *Solanum* using corolla tissue. (Potato Res., 1970, 13:151-153).

(With H.Montelongo-Escobedo) A new pentaploid Mexican wild potato and its progeny. (Evolution, 1970, 24:745-749).

A reconsideration of the genetic mechanism for sex determination in *Asparagus officinalis* L. (n.d., post 1970, no journal reference).

A rapid HCl/toluidine blue squash technic for plant chromosomes. (Stain Technology, 1973, 48:229-231).

Selecting asparagus plants as sources of haploids. (Euphytica, 1973, 22:310-316).

(With D.Schweizer) Giemsa banding: karyotype differences in some species of *Anemone* and in *Hepatica nobilis*. (Chromosoma (Berl.), 1974, 44: 405-416).

Giemsa banding of meiotic chromosomes in *Anemone blanda* L. (Chromosoma, 1974, 49: 113-119).

Variation of Giemsa banding patterns in the chromosomes of *Anemone blanda* L. (Chromosomes Today, vol.5, Proc. Leiden Chromosome Conference, July 15-17, 1974). (3 copies).

Giemsa Bands and B-chromosomes. (Current Chromosome Research, edited by K.Jones and P.E. Brandham, Amsterdam, Elsevier, n.d.) (post-1976).

The nature of centromeric dots in *Nigella* chromosomes. (Chromosoma (Berl.), 1977, 91:369-373).

The cytology of cotyledon cells and the induction of giant polytene chromosomes in *Pisum sativum*. (Protoplasma, 1979, 101:73-80).

Evidence for the occurrence of dispensable and disadvantageous chromatin. (Kew Chromosome Conference II. George Allen & Unwin, 1983, pp.269-272).

Feulgen banding of heterochromatin in plant chromosomes. (J.Cell Sci., 1983,62:171-176).

## FILES

File 1: Pisum Interchanges: Notes, tables, correspondence. c.1971.

File 1.1: Pisum

File 1.2: Pisum (1 )

File 1.3: Pisum (2)

File 2: Lysimachia: Notes, tables, correspondence, photographs, illustrations, reprints. c.1970's.

File 2.1: Lysimachia

File 3: M.150 sto and tuq. hybrids: graphs, chromatograms, tables.

File 4: Asparagus: notes, tables, reprints. c.1969-1982.

File 4.1: Selecting Asparagus plants: as sources of haploids: ms. photographs, correspondence. Also: A reconsideration of the genetic mechanism for sex determination in *Asparagus officinalis* L.: ms. c.1973.

File 4.2: Asparagus: Plots 1-3.:

File 4.3: Asparagus Breeding: tables, correspondence, notes, graphs. c.1982-85.

Files 4.4 to 4.5: Reprints: Asparagus: (miscellaneous authors), includes some notes.

File 4.6: (Ringbinder) Asparagus Seeds and Plots. Celery. in situ Hybridisation: tables, notes, correspondence 1979-1981, etc.. Also: *Lysimachia*: correspondence 1970. Dahlias. c.1977-78.

File 4.7: Asparagus: haploids:

File 5: Dianthus. Spartina:

File 6: Lunaria

File 7: Anemone

File 8: Symphytum

File 9: Ranunculus ficaria. Student's Project: reprints. 1961-83.

File 9.1: Ranunculus ficaria

File 10: G.E.Marks. Norwich. Feugen banding of heterochromatin in plant chromosomes: mss., correspondence, paper. 1982-83.

File 10.1: Feulgen Bands:

File 11: Lathyrus: Graphs, drawings, maps, reprints, tables. c.1964. File 11.1: Lathyrus:

File 12: Genetical Studies in Pears: VII. Apomixis in the Variety "Fertility": photographs, tables, notes, ms. n.d.

File 12.1: Genetical studies in pears. 6:

File 13: Hexanoids: Natural and Synthetic: *Solanum andigena*: bibliography, notes, tables, ms. n.d.

File 13.1: The enigma of triploids: ms., correspondence, notes. 1966.

File 13.2 The origin and significance of intra-specific polyploidy: experimental evidence from *Solanum chacoense*: ms., correspondence. 1965.

File 13.3: Cytogenetic studies in tuberous *Solanum* species. II.

File 13.4: A polyhaploid plant of *Solanum polytrichon* Rydb.

File 13.5: Cytogenetic studies in tuberous *Solanum* species. I.:

File 13.6: Cytogenetic studies in tuberous *Solanum* species. 3:

File 13.7: EC 77: Structural hybridity in a tuberous *Solanum* hybrid

File 13.8: Mexico:

File 13.9: *Solanum stoloniferum*.

File 13.10: Chromosome numbers in potato cultivars hypersensitive to late blight.

File 13.11: San Pedro:

File 13.12: *S. chacoense* ♂ sterility

File 13.13: Corolla preps {Mexico}

File 13.14: *Solanum tuquerrense*

File 13.15: Annual Report: Department of Potato Genetics

File 13.16: *Solanum*

File 14: Giemsa: Chromosome numbers in the genus *Oxalis*, ms., graphs illus., tables. c.1955; Giemsa Banding in Some Species of *Anemone*: Photographs, illus., notes, tables, correspondence, mss., c.1973.

File 14.1: The cytology of *Oxalis dispar*.

File 15: Meiosis in *Anemone blanda*. Giemsa banding of meiotic chromosomes in *Anemone blanda* L.: proof, photographs, mss. 1970's.

File 16: Giemsa banding pattern in the chromosomes of *Anemone blanda*: correspondence, tables, mss. 1974.

File 17: Forsythia: Euphytica & RHS Journal.: Correspondence, ms. 1966.

File 17.2: Forsythia: correspondence, 1962-81. Manuscripts; Notes; Photographs of chromosomes.

File 18: Celery

File 19: K.K.Pandey

File 20: Chromosome ecology of British Galinsoga species:

File 21: An aceto-carminic jelly for use in pollen-fertility counts.

File 22: A controllable carminic technique for plants with small chromosomes. Also, correspondence concerning the manuscript of: A rapid HCl/Toluidine Blue Squash Technic for plant chromosomes.

File 23: The cytology of *Phytophthora infestans*.

File 24: Preps in corolla tissue

File 25: Manuscripts

File 26: Telocentric chromosomes.

File 27: Freesia

File 28: M271.1

File 29: Parsnip

File 30: Wine making

File 31: A simple air-drying technique for plant chromosome spreads

## **Photographs**

Box 1: Asparagus.

Box 2: Celery

Box 2.1: Celery

Box 3: Pinus radiata.

Box 4: Pisum.

Box 5: Giemsa.

Box 6: Ranunculus ficaria.

Box 7: Solanum.

Box 8: Misc.

Box 8.1 Misc.

## **NEGATIVES**

Wallet 1: Anemone blanda: meiosis; Ranunculus ficaria.

Wallet 2: Peas; Anemone; Giemsa Anemone blanda; Giemsa A.coronaria; Giemsa A.cylindrica, A.paronina, Giemsa pisum., Giemsa Hepatica, Giemsa Nuclei, Ipheon, pisum pentavalent.

## **SLIDES**

Boxes (4 x 4.5 inches) of slides. glass negatives and films.

1. Films: Anemone blanda: mitosis. Giemsa. Gen.
2. Asparagus.
3. Chromosome banding.
4. Chromosomes: misc.
5. Chromosomes. Solanum. Phytophthora.
6. 227 embryos 0.3g. 1981.
7. Films 1974, 1975.
8. Films 1976.
9. Films 1977.
10. Films 1978.
11. Lysimachia.



12. Mexico.
13. Negatives 1980.
14. Nigella
15. N.America.
16. Plants: misc., and glasshouses.
17. Plants: Solanum.
18. Ranunculus ficaria.
19. Rhoec, Oxalis, Tropaeolum.
20. 10 single plant selections.

## **Notebooks**

Lathyrus pratensis. n.d.

Mexico 67-68. (Solanum)

*Field book taken into field, with notes from Jack Hawkes. GEM went out twice to work in Mexico.*

Small notebook without a title containing notes on slides, c.1974-1977.

Photography: small notebook, c.1977-1979.

Challenge small notebook without a title: containing notes on slides, 1982-1985.

## **File Boxes:**

Photographs of Diagrams.

Glass Plate Negatives.

1 box: 5 x 7 x 1", containing glass plate negatives:

1. G.E.Marks sitting at microscope.
2. Lady at wash basin.
3. Lysimachia nemorum. slide 2.
4. Williams Pear Tetraploid Lantern slide.
5. Lysimachia nemorum, slide 2.
6. Lysimachia nemorum, slide 2.
7. Table: fruit-setting of diploid and tetraploid fruits.
8. Group photograph of Africans, with trees in background.
9. Page from "Believe it or not": "Roger Giles -Surgin.
10. Microphotograph: 55-2.
11. Fertility pears: fruit ...apple pollen, 9.8.51.
12. Chromosomes  $2n=48$ .
13. Meiosis.

14. Chromosomes, 3x.

15. Tetraploid.

16.3x.

17. Diploid.