They give the possibility to observe whether the indicator and the rootstock used were indeed virusfree.

The indicator varieties to be used are Goudreinette (Belle de Boskoop) and Lord Lambourne. With the first indexing will be possible for rough skin, proliferation, rosette and mosaic, with the second for rubbery wood, mosaic and for chat fruit, when necessary.

The first results may be awaited within two to six years: in two years for the diseases, which give symptoms in the leaves or wood, in at least six years for the diseases, which give symptoms on the fruits.

At first all the indexed mother trees which show to be free of the diseases observed will form the source for the nurseries. It is the intention to concentrate later on in a special field only a few of such trees, which will be indexed more thoroughly. Re-indexing will take place as often as may be necessary.

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## REPORT ON THE DISCUSSION ON INTERNATIONAL EUROPEAN COOPERATION IN FRUIT TREE VIRUS RESEARCH

On Saturday morning August 27, 1955, a general discussion was held on international European cooperation in tree-fruit virus research under the chairmanship of Dr R. V. Harris, head of the Plant Pathology Department of East Malling Research Station (G.Br.). As aims of such a cooperation were proposed:

- 1. To accelerate the acquisition of knowledge by pooling experience of the diseases under differing conditions.
- 2. To avoid the time-lags caused by delays in publication of research results, thus accelerating their application in practice.
- 3. To avoid the wide dispersal of viruses in infected plant material by collectively working towards the production and use of virusfree clones.
- 4. To avoid synonymy and confusion in the literature by
  - a. using agreed common indicator varieties and species.
  - b. exchange of visits, and agreement on nomenclature, prior to publication if possible.

Some proposals were made by Prof. R. CIFERRI and Dr G. SCARAMUZZI:

- 1. Establishment of a European Committee of nomenclature for fruit tree virus diseases, working in agreement with American research workers, with the purpose of the uniformity of the nomenclature.
- 2. The sub-Committee will also be charged with the centralization of dry and preserved specimens, coloured photographs and descriptions, for free consultation and reference.

The following conclusions could be drawn from the general discussion:

- 1. The international cooperation in tree-fruit virus research especially in Europe can be furthered along the following lines:
  - Personal contact between individual research workers in different countries.
  - 2. The organization of symposia.
  - 3. The use of the same indicator plants in the different countries to aid the identification of the virus diseases concerned.
  - 4. The publication of a handbook on European fruit-tree virus diseases.
- 2. A European Committee for Cooperation in Fruit Tree Virus Research has been established with the aim of promoting the points 1.2, 1.3 and 1.4 (see above). The first tasks of this Committee are:
  - 1. Making preparations for the next symposium.
  - 2. Composing a list of recommended indicator varieties and species for fruit tree viruses in Europe, which will be the first step towards uniformity of nomenclature, and to be presented before the next symposium.
  - 3. Composing a European bibliography with the help of one correspondent per country as a first step towards the composition of a handbook and to be presented at the next symposium.
- 3. As members of the European Committee were asked to act:

Dr S. Blumer (Wädenswil, Switzerland)

Ir C. A. R. MEYNEKE (Wageningen, Netherlands)

Dr D. MULDER (Wageningen, Netherlands)

Dr A. F. Posnette (East Malling, Great Britain).

Dr Blumer did not accept the nomination and afterwards advised to ask Dr R. Bovey from Lausanne (Switzerland). The others accepted the nomination. (Dr Bovey also accepted the nomination in the meantime).

- 4. In general the following reasons were put forward for holding a symposium in a certain country and a measure of support was expressed for each:
  - 1. actual research has been done, f.i. on transmission of virus diseases, selection of virusfree material, etc.;
  - 2. interesting symptoms of diseases resembling virus diseases already known in other countries have been found.

This implies that such symposia will not necessarily be held yearly but only periodically when wanted and needed.

- 5. It has not been made a principle to restrict the symposia to pome and stone fruit species, but it has been considered practical to confine the symposia to woody fruit plants grown in Europe with the exception of vines. Main criterium has to be the fact whether research is done on the subject or not (see also point 4.1).
- 6. The next symposium will be held in 1956 in East Malling (G.B.), for which symposium Dr A. F. Posnette will act as secretary. One of the tasks of this symposium will be to agree on the use of the proposed standard list of indicators and to stipulate further steps towards the composition of the handbook.

- 7. It was not thought practicable in view also of the experiences in the U.S.A. and Canada as brought forward by Dr Berkely (Can.) to try to establish a bureau or a permanent central point for collecting documentation on virus diseases of fruit trees in Europe (photographs, herbarium-material, lanternslides, etc.). This would cost too much time for too small an effect.
- 8. The European Committee for Cooperation in Fruit Tree Virus Research will keep in contact with research workers outside Europe. This contact can be established by keeping some correspondents overseas informed on the activities in Europe as was asked for by Dr Atkinson (N.Z.). It will be of importance to establish contacts with the North American working-parties in this field. Especially it will be of importance to agree upon the same minimum host range in U.S.A. and Europe. Exchange of indicator material will be highly desirable.
- 9. It was decided to inform F.A.O. and E.P.P.O. that a symposium on virus diseases of fruit trees in Europe was held in the Netherlands in 1955 and that a permanent organization has been made, acting by means of a European Committee for Cooperation in Fruit Tree Virus Research.
- 10. Prof. T. H. Thung, member of the symposium and chairman of the Committee on the Classification and Nomenclature of Plant Viruses of the International Botanical Congress, was asked to give the same information to the International Botanical Congress.

Wageningen, Netherlands November 1955 C. A. R. MEYNEKE D. MULDER

## A STANDARD MINIMUM RANGE OF INDICATOR VARIETIES FOR FRUIT TREE VIRUSES IN EUROPE

Composed by the European Committee for Cooperation in Fruit Tree Virus Research.

Note: This list of suggested indicators will need to be amended periodically as new information becomes available. Alternative indicators are given in brackets.

Host	Disease	Virus indicator	Where obtainable
Apple	Rubbery wood Mosaic Chat fruit Proliferation Witches' broom Rough skin Star crack Flat limb Rosette	Lord Lambourne  """  Belle de Boskoop  Belle de Boskoop  (Glorie van Holland)  Gravenstein  Belle de Boskoop	East Malling """ Holland "" Denmark Holland

Host	Disease	Virus indicator	Where obtainable
Pear	Stony pit  Mosaic	Beurré Hardy (Clapp's Favourite) Beurré Hardy (Brederode)	East Malling "" Holland
Cherry	Ring spot (including tatter leaf and ring mottle) Rugose mosaic (rosette) Rusty mottle Leaf roll Yellow mosaic (caused by plum line pattern virus) Rasp leaf Pfeffinger Eckelrader Sour cherry yellows	Mazzard F 12/1  """  """  ""  Bing (Napoleon)  Montmorency	East Malling """ """ """ """ """ """ """ """ """
Plum	Prune dwarf Line pattern Ring spot  Bark split Plum pox	Italian Prune (Lombard Plum) Myrobalan seedlings (Mazzard F 12/1) (Shiro plum) Mazzard F 12/1 (Myrobalan seedlings) (Peach seedlings) Cambridge Gage Pozegaca	East Malling "Locally" East Malling "East Malling Locally "East Malling Jugoslavia
Peach	Ring spot Line pattern Other diseases	See plum and cherry Peach seedlings	Locally
Latent sto	ne fruit viruses Ring spot strains  Dusty yellows Dark green mottle	Peach seedlings Shirofugen Kwanzan F 12/1 Peach seedlings	Locally East Malling "" Locally

East Malling, 29-9-55

The Committee: h.t.

A. F. POSNETTE C. A. R. MEYNEKE D. MULDER