Marien, Daniel. Queens College. Drosophilidae from the northern Netherlands.

Collections were made between September, 1963 and August, 1964 in the vicinity of Groningen in the north of Holland. The flies were attracted to large containers of

decaying fruit, usually banana, but including plums, apples, tomatoes, grapefruit, and oranges as available locally. Since the flies were trapped incidental to collecting samples of <u>D</u>. <u>subobscura</u> for experimental purposes, and since but one collecting technique was employed, the list of species is no doubt incomplete. Although some are from several nearby localities, and the coastal island of Schiermonnikoog, the majority of flies were trapped in the "Hortus de Wolf," a small, mixed woodland near the Genetical Institute of the State University at Groningen. Most of the species found there, however, are not kept in stock at the Institute and only a very few specimens of one <u>D</u>. <u>melanogaster</u> mutant, being used in experiments from March, 1964, were recovered in the "Hortus," and only after that time.

Sobels, Vlijm, and Lever (1954, Arch. Néerlandaises Zool., 10:357-374) have published on the distribution of Drosophila in the Netherlands, but they had no material from Groningen or the northern part of the country. Other than Parascaptomyza and Chymomyza, no species not listed by Sobels et al. were found in the present survey. Four species recorded by them are absent from the Groningen collection, but they are either very uncommon (D. rufifrons, D. cameraria, D. polychaeta) or of very restricted ecology (D. macularis). Their identifications of D. bifasciata and D. helvetica are probably erroneous; their records of the former are most likely referable to D. obscura and of the latter to D. silvestris. Some differences were noted between our two investigations, particularly my finding that D. obscura was much more common than D. subobscura, that D. limbata and D. littoralis were not at all rare, and that D. deflexa occurred in woodland. Some of these differences may be due to differences in extent, intensity, and time of collecting.

Frequency and distribution by month of drosophilid species in the northern Netherlands in 1963-1964

| Species | Month | \$ | ď | Tota1 |
|-------------------------|----------------|-----|------------|----------------|
| Chymomyza costata | May-July | 0 | 3 | 3 |
| Parascaptomyza disticha | July-Oct | 3 | 3 | 9 ^a |
| D. deflexa | June-July | 8 | 9 | 17 |
| D. busckii | June-Nov | 43 | 47 | 90 |
| D. melanogaster | April-Oct | 259 | 319 | 578 |
| D. simulans | June | - | 2 | 2 |
| D. obscura | April-Nov | 398 | 771 | 1169 |
| D. silvestris | May-Nov | 44 | 124 | 16 8 |
| D. tristis | July, Aug, Oct | 5 | 13 | 18 |
| D. ambigua | June-Oct | 16 | 18 | 34 |
| D. subobscura | April-Nov | 276 | 325 | 601 |
| D. transversa | April, Oct | 1 | 2 | 3 |
| D. phalerata | June-Oct | 26 | 37 | 63 |
| D. kuntzei | June-Oct | 3 | 16 | 19 |
| D. limbata | Apr, July, Oct | 20 | 18 | 38 |
| D. littoralis | June -Aug | 6 | 9 | 15 |
| D. testacea | May-June | 2 | 2 | 4 |
| D. funebris | April-Nov | 115 | 272 | 387 |
| D. hydei | July-Oct | 49 | 5 1 | 100 |
| D. immigrans | June-Nov | 58 | 203 | 261 |
| D. fenestrarum | Sept | 1 | 0 | 1 |
| | L | | | |
| | | | | 3580 |

^aIncluding 3 unsexed individuals.