ON THE DISTRIBUTION OF CAREX AQUATILIS WAHLENB.

D. BAKKER

(Biological Department, North-Easternpolder Works, Kampen)

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The boreal Carex aquatilis was discovered nearly ten years ago in the Netherlands, in the provinces of Groningen and Drente (the northern part), in the north of this country. In the herbarium of the Royal Botanical Society of the Netherlands some older specimens from this area are preserved, erroneously identified by the collectors as *C. acuta* L. or *C. gracilis* Curt. (KERN and REICHGELT, 1947). The stations in the north of the Netherlands were the southernmost known.

Outside the Netherlands the area of its distribution in Europe comprises Ireland, West and North England, Scotland, Iceland, Norway (to the south as far as near Oslo), Sweden (to the south it becomes rarer), Finland, Esthonia (near Reval) and North Russia (as far as Leningrad). Between the stations in the above-mentioned countries and those in the Netherlands a disjunction occurs, for *C. aquatilis* is not recorded from N.W. Germany and Denmark (ANDREAS, 1951). Because of the disjunct area and the occurrence of fossil remains in layers, belonging to the glacial period Miss Dr. CH. H. ANDREAS (1951, 1953) considers *C. aquatilis* in the Netherlands as a glacial relic.

In 1955 the present writer found C. aquatilis in the central part of the Netherlands near Wanneperveen (N.W. Overijssel) and Kolderveen (S.W. Drente). In this peaty area the species grows at the side of ditches, in marshy spots in pastures and in pools, more or less abundantly and mostly in the company of Carex acuta L., C. nigra (L.) Reichard and C. rostrata Stokes. In 1956 the species was discovered in and near "Lindevallei", between Peperga and Wolvega (province of Friesland), in hardly fordable marshland. C. aquatilis grows here in large numbers and in the company of C. acuta and C. rostrata. Moreover, I found the species this year to the east of Berkum near Zwolle (province of Overijssel), at the side of a ditch in peaty grassland. The last place is the southernmost station known at the moment (Fig. 1).¹

During a visit to the Netherlands in the summer of 1955 *C. aquatilis*, which was unknown in Germany, was shown to the German botanist Alfred Neumann. On his journey back to Germany he succeeded in

¹) After this article had gone to press Dr. S. J. VAN OOSTSTROOM and Mr. TH. REICHGELT discovered in the "Rijksherbarium" at Levden material of *C. aquatilis*, originally identified as *C. gracilis* and collected by Kloos along the Reest between Meppel and Yhorst in 1917.

D. BAKKER

finding the species near Ruinerwold (province of Drente). Moreover he discovered the plant at several places in N.W. Germany (East Friesland, Oldenburg, to the east of Bremen). In the herbarium of Trentepohl he found erroneously identified specimens of *C. aquatilis*



Fig. 1. Distribution of Carex aquatilis Wahlenb. in the Netherlands

from Oldenburg, collected in 1793-'94. Neumann succeeded in finding the species again on the "classic station" of Trentepohl. In addition he learned from a study of herbarium material that *C. aquatilis* had been collected in the former East Prussia (in a letter of 6 April 1956). In 1956 the present writer collected the species near Südgeorgsfehn in East Friesland, Germany, at the side of a canal in a peat area.

Apparently C. aquatilis has been overlooked in Germany. In my

opinion the species may also occur in Denmark. If this proves to be the case C. aquatilis in the Netherlands should not be considered as a glacial relic. Then the stations in this country would be the southern border of an unbroken area of distribution.

REFERENCES

ANDREAS, CH. H., 1951. Ned. Kruidk. Arch. 58: 48-56. ANDREAS, CH. H., 1953. The changing flora of Britain: 84-88. KERN, J. en B. en TH. REICHGELT, 1947. Ned. Kruidk. Arch. 54: 248-252.