ACTA HYDROBIOLOGICA SINICA

## 淡水鱼类养殖新对象散鳞镜鲤(♂)× 兴国红鲤(♀)杂交一代(简称杂交鲤) 在生产上的应用

## THE INTRODUCTION OF AN INTER-VARIETAL HYBRID CARP, *CYPRINUS CARPIO*, AS A NEW OBJECT IN FRESHWATER FISH CULTURE

遵照伟大领袖毛主席关于"有了优良品种,即不增加劳动力、肥料,也可获得较多的收成"的教导,湖北省水生生物研究所,先后同协作单位实行科研、生产、使用三结合,进行了鲤鱼品种间杂交选育的试验,发现散鳞镜鲤(♂)×兴国红鲤(♀)杂交一代(简称杂交鲤)有明显的杂种优势。经过几年的研试和生产性推广试验的检验,肯定了杂交鲤的生长优势与增产效果。试验证明:杂交鲤生长速度快,在相同条件下,一般比当地鲤鱼净增产50%左右;生产周期短,在湖北、广东等地成鱼池中每亩混养夏花20—40尾,当年可养成1.5—2.5市厅的商品鱼,每亩净增产20—50市斤;在鱼种池中套养,每亩可增产20—70市斤。加之杂交鲤又有比野鲤易捕捞、病害少、肉味鲜美等优点,因而深受群众欢迎。几年来,经全国16个省、市、自治区的200多个单位进行推广试养,放养面积达20万亩,都取得了一定的增产效果。

湖北省水生生物研究所和主要协作单位(广东省兴宁县鱼苗场、武汉市东西湖养殖场、北京市水产试验站、湖北省浠水县水产局、湖北省黄冈地区水产技术推广站及湖北省沔阳县水利局等),在短短的几年之内,能取得杂交鲤的科研成果并及时成功地进行了推广试验,这是毛主席革命路线的胜利,是社会主义大协作、集体共同努力的结果。

杂交鲤的主要经济性状及其与亲本的比较、制种方法和遗传分析等有关研究结果,已 先后在本刊5卷4期和《几种淡水鱼类养殖新对象》(推广资料,1975)上发表。 现在,我 们选登5篇由一些主要协作单位提供的短稿,介绍杂交鲤在各类水体中的生长情况以及 推广试养的经验体会和今后的推广意见,以为生产上的进一步推广应用作参考,并从而促 进有关科研工作的进一步深入和提高。

According to Chairman Mao's teaching that with good strains of seeds a better harvest is possible without additional manpower or fertilizer, the Institute of Hydrobiology of Hupei Province maintained an association with various other units. On the basis of combining research, practice and application, they have carried out research on the selection of inter-varietal hybrid carp, and discovered the heterosis of the mirror carp of the scatter-scaled type  $(\sigma)$  × Hsing-kuo red carp  $(\mathfrak{P})$ . Through

several years of research and popularization experiments, the vigorous growth and the increase in fish yeild due to this fish have been proved. The experiments show that the hybrid carp has a higher growth rate. Compared with the local carp, the net increase in yield of this fish under similar conditions is about 50%, and the fish grows to a marketable size faster. In Kwangtung Province and Hupei Province, when the small fingerlings of the hybrid were stocked in ponds along with adult fish of other species, the hybrid grew to 750—1250 g within the same year and were marke-And the net increase in fish yield was 10-25 kg per mu. When stocked with other fingerlings the increse in fish yield was 10-35 kg. The hybrid also has the benefit of having a higher recapture rate, being less susceptible to diseases and being Therefore it has been much welcomed by the masses. During the past few years, over two hundred units in sixteen provinces, cities and autonomous regions in China have carried out experiments on the popularization of the hybrid, covering over two hundred thousand mu of water area and they all obtained a certain degree of success.

Within a short period of a few years, the Institute of Hydrobiology and its main cooperators (i.e., The Hatchery of Hsingning County, Kwangtung Province; Tungsihu Fishfarm of Wuhan, Hupei Province; Bureau of Fisheries, Hsishui County, Hupei Province; The Popularization Center of Fishery Technique, Hwang-gang District, Hupei Province and the Bureau of Water Utilization, Mieng-yang County, Hupei Province), have successfully selected this hybrid carp and popularized it. This is the triumph of Chairman Mao's revolutionary line, and the fruit of socialist coordination and cooperative effort.

The economical features of the hybrid carp and its comparison with the parental features, the hybridization method and its genetic analysis have previously been published in This Journal, vol. 5, no. 4 and in the booklet "Some New Objects for Freshwater Fish Culture" (1975). In the following five short communications, contributed by the main cooperators of the Institute of Hydrobiology, the growth of the hybrid in various types of waterbodies and the experience in its popularization are presented. The authors have also made some suggestions on the further popularization of this hybrid carp.

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