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**AFROWEEDS – A COLLABORATIVE AND PARTICIPATIVE ONLINE NETWORK
TO ENHANCE WEED SCIENCE CAPACITIES IN AFRICA**

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Weed competition cause high yield losses in African crop production systems. Conservative estimates show that even for rice alone weeds cost economies of sub-Saharan Africa (SSA) already a near \$1.5 billion per year. For subsistence farmers in SSA there is only a limited range of affordable and effective control strategies. Due to the diversity of weed species, the complexity of crop – weed ecology and associated environmental and management interactions, as well as the socio-economic constraints of subsistence farming in Africa, few effective weed control strategies are developed so far. Moreover, even the limited number of control strategies, or component technologies currently available face limited dissemination and adoption among the (rice) farmer communities in SSA. The above described situation is largely the result of the sub-optimal capacities of agricultural research and development (R&D) organizations in SSA. The region has an extremely low ratio of trained weed scientists per farmer.

Conversely, in the absence of weed scientists, students, R&D professionals or farmers looking for information on weeds, reliable, comprehensive and comprehensible sources are scant and scattered. The EU-ACP funded Afroweeds is an initiative of CIRAD and Africa Rice Center (AfricaRice) to link European and African botanists and weed scientists with the objective to enhance the regional capacities in these fields of expertise. Afroweeds is a network for professionals and students aimed at sharing knowledge on rice weeds. The *modes operandi* of Afroweeds is an open-access website (<http://www.afroweeds.org/network>). This online platform enables members to exchange information, discuss relevant issues and to access an increasingly extensive library of information and photos on weed species and management. The most eye-catching features of the Afroweeds collaborative platform are the extremely user-friendly weed species identification tools. They encompass image recognition software and a multiple-choice program (called 'plant robot') using schematic drawings of plant organs (e.g. leaves, flowers). Identification results can be cross-checked with a rich gallery of photos of fieldgrowing or herbarium specimen and information on ecology and biology, while the Afroweeds data base can also be consulted for effective management options. The strength of the Afroweeds collaborative site further lies in the fact that information and concerns can easily be shared with the other members of community for feed-back. By facilitating such exchange between actors who are otherwise isolated from each other, Afroweeds contributes towards spreading and enhancing knowledge on rice weeds and best weed management practices to improve the productivity of African rice-based cropping systems.

Keywords: Africa, rice, knowledge base, online platform, identification tools